LAJOS HÉTHY and CSABA MAKÓ

PATTERNS OF WORKERS' BEHAVIOR AND THE BUSINESS ENTERPRISE

INSTITUTE OF SOCIOLOGY
OF THE
HUNGARIAN ACADEMY
OF SCIENCES

INSTITUTE OF LABOUR
RESEARCH,
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In the language of sociology the term *workers behavior* comprises all those forms of action about which a long-lasting, large-scale, and many-sided debate has been carried on in our country for a number of years. The term covers the types of behavior of manual workers in the various sectors of industry manifested in the areas of production and distribution. These types of behavior play an indirect role in practically all indicators of economic development: productivity, economic efficiency, profitability, the output and quality of products, the fulfillment of plans, and so forth. These patterns of behavior are the principal agents in several current economic problems: work discipline, labor morale, work intensity, etc. They are approvingly discussed when, for example, the results of work competitions of the socialist brigade movement are assessed. Contrarily, they are often condemned when work dodging, poor product quality, material and energy waste, or resistance to efficiency incentives are issues on the agenda. All these are not only economic but also social questions and, indeed, questions of some political significance. Hence, the concept of workers' behavior involves a number of broad and deep-reaching problems that are not only worth discussing but must also be dealt with systematically by scientific means.

The subject of the study is related to production and distribution, hence it is the workers' "complex" types of behavior and the socioeconomic environment forming them that we will be explored. In its narrower sense we understand by environment the given industrial unit (enterprise) , and in its broader sense the socioeconomic superstructure. The fact that we speak of actions related to "production" and "distribution", hence of patterns of behavior explicitly tied to enterprises and manifested within their framework, makes it obvious that we do not wish to dwell exclusively upon the workers' social and political activities. The key issue is to find out how workers do their work in the eight hours of the workday and why they work that manner, detailing the level of wage differentials and why they exist. It will not be within the scope of this analysis to detail what activity workers perform, for example, at elections.

On the basis of the research findings of our field work we will analyze

methodologically and from various angles the types of people's actions regarding the individual aspects of production and distribution, and the way these actions have come about. We will describe, in as much detail and depth as possible, the world of the workplace, what people do in it and why. We will be concerned with the types of workers' activities and with the socioeconomic factors determining then. Since we have tried to approach the problems from a social and economic angle, our viewpoints and methods will necessarily deviate from the sociological approach in its strict sense. This kind or scientific approach is an interdisciplinary one, and the given case is a combination of economics—more specifically industrial economics—and industrial sociology.

The examination of the interactions between workers' behavior and the enterprise's interest and power relations, of the system of transactions within the organization as well as of the intricate system of interrelations, the set of social and economic factors, is an undertaking of fairly recent origin in Hungary. But the relative novelty of the problems and of the relationships disclosed by no means enables us to attribute general validity to our results. We are fully aware of the fact that, owing to the different technological, economic and social variables, the problems and phenomena described by us in one single plant appear in different forms, if at all, in another plant and give rise to different problems. Our aim is to seek the ways and means of achieving, through systematic research work, a set of examinations that will obtain the results needed to resolve several economic problems.

Certain patterns of behavior constitute, as is commonly known, very serious difficulties at the enterprise. Although the complex types of behavior, as our study will unambiguously show, are too varied and too intricate as regards their background and effects to be classified simply according to the opposite value pair of positive–negative, many of them are rated as negative in the public opinion. They are really "negative" in the sense (and exclusively in the sense) that in a given time and context they pose problems to the enterprise and the economy, represent actions that deviate from and are even opposed to the objectives set for the enterprise, and hamper in a given time and respect the realization of interests that are usually called enterprise or higher order interests. These are, for example, loose workshop practices and performance restriction that is reminiscent, in individual traits, of striking. At the same time, public opinion regards as "positive" the working collectives attaining outstanding achievements in the work competition of the so-

cialist brigades. Thus the "negative" and "positive" features coexist, sometimes—if not frequently—side by side.

Since our study can by no means aim to provide a "general", "clearly defined" theory of workers' behavior and of its socioeconomic implications, a theory which we do not and cannot dispose of, our work will not follow the clarified logic of the system based on our research findings, but the much clumsier logic of the process leading to the results. The first step of the procedure is a "stab in the dark"—the description of certain complex patterns of behavior.

Manifestations of Workers' Behavior

In our study we will analyse the patterns of a group of sheet metal workers in a large company in western Hungary. These workers were engaged in manufacturing railway coaches, and their task was to remove the bumps and dents on the "naked" bodies of railway coaches by means of hammering and warming them up. They worked in a workshop that they called, because of the ear-splitting noise, the "concert hall" or "conservatory". They were a group of about sixty men, all hard-working and ambitious workers, part of them under, others over thirty, with only a few above forty years of age. They constituted a work-team—a socialist brigade, a very solidary group of people.

The sound of the constant knocking by sixty hammers was amplified by the empty iron cases to such an extent that the resulting noise approached the pain level. The men worked with cotton-wool pads in their ears, and it was almost impossible for them to speak to and understand each other. They indicated by gestures if they wanted a different hammer or a water pot.

"Our joints, nerves, eyes and ears are being spoiled." "The eye-nerves are sometimes so exhausted that our sight fails us. You wipe off your forehead, go away for a short while, come back to realize that the ruler shows a result completely different from before." "Sometimes, when I go to bed in the evening, I am unable to fall asleep because my nerves are on edge, I continue to hear a chirping." "I have been working here for ten years and I'm becoming hard of hearing". These are some of the ways how the always tired and nervous sheet-metal workers characterized their working conditions.

At the time of our field work, these workers—owing to the physical demands of their jobs and for other reasons to be analyzed later—were among the best paid workers of the company. They worked according

to a piece-rate system. In 1967 and 1968, they worked on two types of coaches. On one of them they could earn well, but on the other—owing to the strictly set rates—their earnings were "bloody" bad. In their earnings overtime and incentive bonuses also played a decisive role.

In 1963, the following events took place. In the first quarter of the year (as at the beginning of all preceding and subsequent years) the enterprise radically restricted the wages. The management pushed the production of the "low-paying" type of coach to an even larger scale in February and March. Overtime was reduced from month to month and no incentive bonuses were provided. There was an overall drop in the output of the unit, covering all skills, and the earnings declined even more sharply. In comparison with the last quarter of the year, the hourly wages of sheet-metal workers fell by one forint in January, by two forints in February and March (down to ten to eleven forints), and the workers also lost their substantial overtime payments.

In April the situation improved: bigger share of the "well-paying" type of coaches in the production was ensured by the management. Workers engaged in other skills also managed to increase their output and earnings. In the levelling workshop, however, in the case of the side-levellers, constituting the large majority, the output indicator unexpectedly fell to 66.7 percent, which was an extremely low value, as earlier the workers had generally attained results over 100 percent. The hourly wage rates fell to 6.80 forints. Nevertheless, people, at least seemingly, were working industriously, with calm diligence: they warmed up and hammered the bumps and dents on the sheets of the coaches, from time to time they placed their rulers against the sheets, thus checking and controlling the result. Under the surface of tranquillity, however, the nerves of the workers were overstrained. Tension could be felt in the air. Younger people (below the age of 30) were affected catastrophically by the anticipated extremely low wage level of the group, as in the given wage rate system their hourly wage could not attain even 6.8o forints. The "older" workers, on the other hand—presumably for tactical reasons—were accusing the younger people of not being able to or not wanting to work. The group leader, the shop-steward and some professionally outstanding "older" workers were called upon by the unit's management to encourage the others and work overtime because the "coaches had to go". They refused to do so: "at an hourly wage of 6.80 forints we should not be expected to work an additional two to four hours in this ear-splitting noise." (Overtime was paid according to the earn-

ings during normal working time.) The younger workers, however, who had also been offered this possibility by the unit management, accepted to work overtime.

The tension between the two strata of workers was increasing. "Youngsters are more highly esteemed by the managers than older workers. Young people are unmarried, they can do overtime. By doing overtime, one can conceal a lack of skills." Nevertheless, the output did rot increase and it seemed as if production "had stopped". The party secretary was trying to wheedle the party members of the leveling group and the trade union secretary the shopsteward into involving "older" workers in overtime work. In the office dreadful scenes took place between managers and workers. Six excellent sheet-metal workers with great experience quit, and two others—referring to their state of health—asked to be transferred to other factory units. (There were several party members among them.) "The eight men who gave notice would have finished the coach in one day", said the others approvingly. Several younger people also left the company, while others, making use of their constant joint and nerve complaints, stayed at home on sick pay. Thus things were getting worse and worse, the tight situation threatened the continuity of the entire coach production, the work of several units. Unit managers and workshop supervisors lost their head: they delayed transfers justified by the health conditions of workers, in other cases they telephoned doctors' consulting rooms and pressured the doctors "not to let sheet-metal workers go on sick leave for they are only simulating complaints." The foremen were constantly "at the workers' heels"; they "watched the time" and did not leave it unnoticed if somebody went to the toilet for five minutes.

In the second half of April, the management of the company found it advisable to intervene in the acrimonious situation and, in order to ensure the continuity of coach manufacturing, took radical incentive measures. Considerable special incentive bonuses were fixed with the deadline of June, later prolonged to September and ultimately until October. In May, June, and July almost exclusively "well-paying" types of coaches were produced. (Within certain rational limits, the management was relatively free to change their production ratios.) In the leveling workshop, just as in the other units, the situation changed as if by magic: output and earnings increased sharply. In September the "older" sheet-metal workers (working, because of their conflicts with the younger ones, in a separate group since May) reached a 170 percent output index with

hourly wages of 17.51 forints plus overtime. This means that the earnings of the best reached 6,000 to 7,000 forints, including overtime payment, during this period. Working overtime became general practice. In the case of dozens of "older" sheet-metal workers, the amount of overtime exceeded 500 hours annually. This meant their working day, under almost unbearable circumstances, was extended to about ten hours, often including the weekends. Labor turnover dropped to a minimum level after May.[1]

Workers' Behavior and the Enterprise Organization

Complex workers' behavior appears in the framework of the industrial enterprise and is, in a sense, the product of its operation.[2]

The organization whose operation we analyze in our study, where the leveling workshop's performance declined, is one of the largest engineering companies in Hungary. Its main products are railway coaches, rear axles, and differential gears for vehicles of public transport, machine tools, and, recently, heavy-duty diesel engines as well as heavy trucks manufactured under Western licenses. In the unanimous view of engineering experts, this enterprise is perhaps the best organized and the most rationally managed establishment of the industry, applying the latest technology in its factory units. The dynamism of its development is really imposing. Our decision to carry out our survey at this enterprise was motivated not by its manpower problems (which were, according to our knowledge, less serious than those of the enterprises of the engineering or of the construction industries) but by its high level of organization and dynamics, since the analysis of the workers' attitudes toward work is greatly facilitated by the availability of the elementary conditions for efficient enterprise operation (undisturbed labor and material supply, tool maintenance, etc.). Contrarily, if, owing to the organizational negligence of the enterprise, the workers are forced to get slack in their work, the analysis of their "negative" behavior is a problem pertinent to the sphere of enterprise management rather than to industrial sociology. However, for the examination of workers' attitudes concerning distribution (application of the principle of payment by results, of wage differentials), an excellent domain was provided by the enterprise's dynamic incentive policy measures, to which the workers had to respond continually.

Since the workers' activity is a form of organizational behavior, we found it absolutely necessary for its interpretation to have a theoretical concept, a formal scheme of a general organizational and motivational

theory underlying the structure and operation of the enterprise. The exact analysis and description of this concept, apart from a few partial results, have been a long-standing debt of domestic sociology. This does not mean, of course, that our industrial organizations—among them the enterprise surveyed—were established and have been operating without any appropriate theoretical foundation (although such symptoms can be experienced). Rather, it means that in their functioning they rely predominantly on a traditional pattern that was established in the course of several decades of the industrial past, has never been revised comprehensively, but merely expanded by a few elements. From the point of view of business management, the structure and operation of Hungarian enterprises, like those of the majority of the world's industrial organizations, are also based in many respects on the principles of classical scientific management (Taylorism), significantly further developed over the years. At the same time, the endeavor to apply certain human relations principles can also be observed in their functioning, primarily motivated by theoretical viewpoints.[3]

At the time of its establishment, the industrial organization declares as its basic aim the efficient satisfaction of society's needs. Its objectives, however, do not confine themselves to the general and central functions of efficiency and growth. "In the course of its long development, a modern economic enterprise can be increasingly conceived of as a political system of economic and technical rationality."[4], writes Touraine. This means that in forming the individual kinds of activity, in making decisions (for example, in the case of introducing a new technology, of setting up a new economic incentive system, of creating employee welfare, social, and cultural establishments) account must be taken of the interests and aims of the social strata and groups both inside and outside the enterprise as well as of the organizations representing them (management, the trade union, the party organization, etc.). Consequently, the result of formulating organizational activities and of the decision-making process cannot, in general, be merely expressed in such categories as, for example, economic efficiency.

The organizational structure designed to serve the objectives of the industrial organization is a complex one. The enterprise under examination consists in fact of three different organizations pursuing, in the last analysis, one identical aim. Its core is the actual enterprise administration, that is, the management apparatus. Further integral parts are the trade union and the party organizations. This finds expression also in

the fact that the leadership of the organization is understood to be the enterprise "triangle" comprising the manager, the secretary of the enterprise trade union committee (TUC), and the secretary of the enterprise party committee (PC). (The organizational structure of the individual plant units is the same, with the plant "triangle" being made up of the plant unit manager, the secretary of the plant trade union committee (PTUC) and of the secretary of the party branch organization.)[5]

The structure of the enterprise management apparatus is in consonance with the main objective of the industrial organization: with economic efficiency and the rationalization of work.

The classical requirement of efficiency: (first formulated by Adam Smith and made the basic tenet of Taylor's organization theory) is the division of labor. The whole structure of the organization rests upon this requirement. At the enterprise of our study there are almost 200 skills, but this number provides only an approximate picture of the scope of the workers' specialization, as workers have specialized to perform innumerable tasks within one single skill. The tasks of the work groups, workshops, plants, factory units, and so on are specialized as well. A division of labor similar to that in production can be experienced in the technical and administrative fields. Special departments are concerned with the problems of technology, quality, material and energy supply, transport, etc.

The unity of management and control is designed to offset the inherently anarchic tendency of the division of labor. Since one single person can direct, coordinate, and supervise the activities of only a limited number of employees, the span of authority is relatively narrow. In the production field, generally 15 to 20 workers are subordinated to one foreman, 3 to 5 foremen to one senior foreman, 2 to 3 senior foremen to another supervisor, etc. Management and control are similarly organized in the technical and administration departments.

The division of labor, and the unity of management and control jointly result in a hierarchical set-up. The hierarchy pyramid is organized in several steps. In production, its base is constituted by about 15,000 manual workers, who are guided by several hundred foremen. Above them is the narrower stratum of senior foremen or plant managers, about one hundred in number, subordinated to the stratum of factory-unit management of about ten members, and so on. There is a functional differentiation: between the individual hierarchical levels the activities concerned with setting the objectives are concentrated at the

higher levels, while the managing activities are centered at the medium, and the implementation activities at the lowest levels.

The activities of persons working in the intricate system of the enterprise management are also laid down in a similarly complicated system of rules. The tasks, obligations, responsibilities, and rights of everybody working at each level of the hierarchy pyramid are specified by rules. Rules again govern the relations, the super- and subordination of the individual posts, the decisions, measures and orders to be issued for these posts as well as the channels of the information flow needed for management, coordination, control, and so on.

The trade union and the party organization within the enterprise also have a hierarchical set-up, similar to that in production management. The membership of the former extends to the majority, that of the latter to just a fraction of people working at the enterprise. Along with the foreman exerting his skill guidance in the workshops, the shop stewards and the party functionaries are always present. In addition to the professional leadership (factory-unit manager, plant manager, senior foremen, foremen, etc.), the plant trade union committee and the leadership of the party branch organization are operating everywhere, keeping an eye on all aspects of the plants' operation. Similarly, at all enterprise levels there also exist the enterprise trade union committees, and the party committees, which follow with attention the working of the enterprise as a whole, coordinating, guiding, and controlling the work of the enterprise trade union and party organization. The tasks, obligations, responsibilities, rights, and the super- and subordination and coordination relationships of people working in the individual posts as well as the decision-making mechanism and information flow are regulated by rules within the two social organizations just as in the enterprise organization.

Within the enterprise as a whole, the relationship between production management and the two social organizations is not shaped in an *ad hoc* way. Among the rules governing the structure and operation of the complex organization, great importance is attached to those rules that determine the interrelations of the three organizations. Accordingly, the trade union has the right of intervention at all levels of enterprise management in making decisions and measures and in certain cases also of vetoing them. The party organization does not enjoy similar rights, although of course through its membership in both the production management and the trade unions it exerts a significant influence on the course of events. Its own system of internal rules strictly prescribing the

party discipline makes this intervention possible.

The establishments of the complex industrial organization (posts, tasks, obligations, responsibilities, the decision-making mechanism, the channels of information flow, etc.) are empty forces in themselves. To fill them with life and to make the organization work, it is necessary to create harmony among the objectives, needs, and interests of the organization on the one hand, and among the objectives, needs, and interests of those working in it, on the other. These groups of objectives and needs partly support each other. The increasing efficiency of production and the growing rationalization of work make it, in principle, possible for the incomes and living standards of the manual and nonmanual workers employed in the enterprise to rise. Similarly, the increasing prestige and authority of the enterprise may enhance the prestige and authority of its employees. (For the latter a good example is provided by the enterprise under investigation, which is surrounded by a nation-wide myth of which its employees are justly proud.) While the relationship between the objectives and needs of the organization and the objectives and needs of the individuals working in it is a close one, the activity of those employed automatically adjusts itself to the requirements of the organization.

But the problem is the very fact that this harmony is never complete and, occasionally, very far from satisfactory. This is because growing enterprise efficiency does not necessarily bring about growing incomes for all individuals and for all strata. The increasing prestige of the enterprise does not necessarily result in increasing prestige for all its members. Hence, the organizational and the individual objectives, the needs and interests, are sometimes far from each other. This is true by all means of an enterprise whose operation is determined primarily by technical development and the required rationality that makes it extremely difficult for people to share their interests with the interest of the organization. (Sociologists, as commonly known, have been criticizing these negative implications of the "fragmentation" and of the routine character of jobs for several decades.) But similar symptoms can also be met in relation to the trade union and the party organization.

From the point of view of business management theory, it is, as a matter of fact, the discrepancy between the objectives and interests of the organization and the objectives and interests of the strata, groups, and individuals working in the organization that gives rise in the final analysis (and indirectly) to the forms of activity deviating from or

opposed to the organizational objectives, including "negative" workers' behavior.

The Control Mechanism

It is the probability of the occasional or lasting lack of harmony between the objectives and interests of the enterprise and those of the strata, groups, and individuals working in it that, for the management and, to a certain extent, also for the trade union and the party organization, justifies the establishment of a special control mechanism to ensure—by relying on the direct or compensatory satisfaction of certain human needs—the coincidence of the staff's action with the objectives of the organization, that is, the harmony between the organizational and the individual objectives and needs. The control mechanism is assigned a pronounced role in the economic organization. This specific, marked role has always existed over the past decades even if the means of the control mechanism have changed, and it still exists today.

Since the enterprise management, the trade union, and the party organization perform their activities within the industrial organization for the same or closely related objectives, their control mechanisms, while hard to distinguish, mutually reinforce or weaken each other.

The control mechanism of the management is basically of a utilitarian character: it rewards and penalizes mainly by economic means, wishing to establish harmony between the material objectives and interests of the organization and of the individuals working in it. Its most important means are the regulation of wages and salaries, rewards and bonuses, etc., i.e. the entire system of material incentives. The dominant role of the utilitarian elements does not exclude, of course, that normative (non-economic) elements are also applied. By providing or withdrawing material advantages, the enterprise appeals not only to the people's demand for "economic utility" and a higher living standard, but also to their need for social appreciation. In the intricate structure of Hungarian society, the material state, owing to the poor perspicuity of other prestige symbols, is the most obvious yardstick of social prestige and appreciation. A highly differentiated kind of thinking and a high degree of information are necessary to tell exactly the importance of the work done by X or Y in a complicated enterprise organization, to tell what measure of knowledge and what degree of talent are required and how it can be compared with the work done by somebody else. Money is a much simpler indicator, and people who, compelled by their high

sensitivity to prestige, always make "calculations" are of course inclined to use it as a yardstick.

The control mechanism of the enterprise also relies on prestige symbols only indirectly connected with money. A special yellow overall made up with the emblem of the most up-to-date enterprise factory units may be a prestige symbol for the workers, but undoubtedly to the heads to the functional departments and to managers a title, a separate office room, a secretary of their own, the use of an enterprise car, etc. are more significant. The utilitarian and normative elements are similarly mixed up in a factor constituting, along with the incentive system, a significant part of the control mechanism, namely the promotion system. This is the mechanism through which individuals may proceed to those posts of the organization hierarchy that promise more money and greater prestige. This factor deserves special attention since in Hungary, among the nationally debated problems of the economic and non-economic incentives, it has hardly been mentioned at all.

Important elements of the control mechanism of the enterprise are factors jointly established by the enterprise management and the trade union. They are factors created with the active participation of the trade union and operating under its supervision. Such factors are the socialist brigade movement, work competition, the award of the "excellent worker" title, and so on. Utilitarian features are represented in these forms only by symbolic money rewards, hence they are predominantly of a normative nature, relying primarily on the non-economic needs of people. Thus the aim of the socialist brigade movement is to bring about united collectives achieving outstanding production results—collectives that live not only inside but also outside the factory. Thus, the socialist brigade is designed to satisfy, among other things, the enterprise staff's natural demands for social life, for maintaining personal contacts, for belonging to a community, and, last but rot least, for social appreciation and prestige. At the same time, the socialist brigade movement also builds on the sincere commitment to social aims of its members. A similar role within the control mechanism is played in conjunction with the socialist brigade movement by those institutional forms that are designed to encourage the workers' direct involvement in enterprise decisions (participation in production meetings, etc.).

The trade union and the party organization also have their own control mechanisms intended to serve the objectives of the enterprise on the one hand (insofar as the social organizations and enterprise—the eco-

nomic organization—pursue identical or closely related aims) and their own objectives, on the other (for example, interest enforcement in the case of the trade union, and political work in the case of the party organization). The control mechanism of the trade union is partly utilitarian (ensuring certain economic advantages to its members), partly normative. At the same time, the control mechanism of the party organization is, at least in principle, almost exclusively normative, as it relies on the inner conviction and commitment of its members. To those members performing outstanding work in serving the party's objectives, i.e. in productive and political work, the party organization accords increased moral appreciation, assigns them important and responsible tasks, and involves them in the leadership. It penalizes first by normal means, then, in extreme cases, by excluding from membership those who carry on activities opposed to the party's objectives.

The Payment-by-Result Principle

The control mechanisms of the enterprise—enterprise management, trade union and party organization—can function efficiently only if they apply rewarding and penalizing measures consistently, by constantly comparing and weighing the organizational objectives and the individual and collective activities. The basic principle ensuring the successful operation of the control mechanisms is the payment-by-results principle, whose efficient operation the organization strives to attain by creating institutional safeguards (the wage set-up, the system of profit sharing, the rules of awarding the socialist brigade title, etc.).

In the case of the control mechanism of the enterprise management based on material-economic (utilitarian) means, the principle of payment-by-results is synonymous with the so-called principle of distribution by work. This means that the enterprise proportionately rewards the actions that conform to its objectives, needs, and interests, while it proportionately penalizes the actions that deviate from or are opposed to them. Proportionality requires that the individuals working in the organization enjoy economic benefits in proportion to their contribution to the success of the organization, whereas in the case of "negative" activities they should bear the economic disadvantages. The requirement of proportionality of course cannot be confined to one or the other level of the enterprise hierarchy: the principle of distribution by work should determine both the internal and the relative earning proportions of all hierarchical levels.

The control mechanism can only orientate the members of the organization in the right direction if the payment-by-results principle involves not only the utilitarian, but also the normative means. From the point of view of the enterprise objectives it is obviously harmful if the organization incentive system rewards actions deviating from the organizational objectives and penalizes those in conformity with these objectives. Similarly, detrimental consequences may also arise if the payment-by-results principle is in effect in the field of economic incentives, but not in the promotion system. At the same time, a destructive effect is created if the socialist brigade title is accorded to groups that are not worthy of it, or if "excellent worker" titles are given to members who do not deserve it, or if the awarding of these titles takes place *ad hoc* rather than in accordance with the payment-by-results principle. In these cases, it is largely the fault of the organization if the objectives and needs of its members are not in line with its own objectives and interests.

The basis of the operation of the control mechanism is provided by theories of motivation. The control mechanisms of Hungarian enterprises —the "human image" constituting the basis of their establishment and operation—represent a peculiar mixture of the characteristics of the motivation theories of Taylor's scientific management and of Mayo's human relations approach.[6]

Taylorism (which finds a marked reflection in the views of many economic leaders) seeks the motive force of human actions almost exclusively in economic incentives. It sets out from the assumption that a member of the labor force working in any plant unit is an isolated, absolutely, rationally thinking and acting egocentric individual inspired by the desire for gain, who is also, in principle, always ready for cooperation and for respecting the instructions, provided his individual claims for payment are satisfied . This hypothetical worker is receptive only to formal penalizing sanctions and rewards. He varies as to sex, age,and a number of clearly definable capabilities, otherwise he is non-differentiated as regards to temperament, habits, attitude, as well as other social and psychological factors.[7]

According to Taylorism, the application of the scientifically elaborated method of incentives—the consistent implementation of the payment-by-results principle, ensures the activity of the individuals in the organization, in keeping with the organizational goals, their satisfaction and the organization's freedom from internal conflicts.

The human relations approach sharply and, to a certain extent, justly

criticizes Taylor and his followers and has elaborated alternative solutions to enhance motivation. According to Mayo, "People working in a workshop behave not purely as simple individuals but constitute a group in the course of which they establish social relations with one another and with their supervisors.". In this approach, people working in the organization wish to express their natural demand for social life, for belonging to a community, for social contact, appreciation,and prestige, for "creative work". Consequently, their behavior must be interpreted not only in dimensions of rewards and sanctions, but also in social and psychological respects, and the motive of their activity has to be acknowledged not in money terms but in the application of other methods. In the human relations model (especially, in its so-called participatory varieties developed by Levin) the methods and styles of management and community building have a key role to play.[9] Democratic management methods, work-group development, organization of common extraplant movements (thus the creation of plant institutions, the program of the socialist brigade movement, etc.)—also urged by domestic social leaders, sociologists, and psychologists—represent the realization of certain principles of the human relations approach. Mayo's motivation theory asserts, like Taylorism, that the application of its methods certainly ensure the staff's behavior consistent with the organizational goals, their satisfaction, and "harmony and peace" within the organization.

Derivation of workers' behavior from the enterprise's Theoretical Scheme of Functioning

The activity of the individuals and groups working in an enterprise is basically determined by the organization as a whole as well as its direct environment. Part of this direct environment is constituted by the goals set by the individual organizations operating within the complex enterprise (the management, the trade union, the party organization) as well as by the firm's organizational structures established for the implementation of these goals. The latter include all formal rules that describe and are responsible for creating the entire system of the following institutions: the posts, functions, obligations, rights, responsibilities, sub- and superordination relations, decision-making mechanisms, information flow and control mechanisms. Within them, a specific, prominent role is assigned to the control mechanisms responsible for invigorating the individual organizational institutions (enterprise, party, etc.).

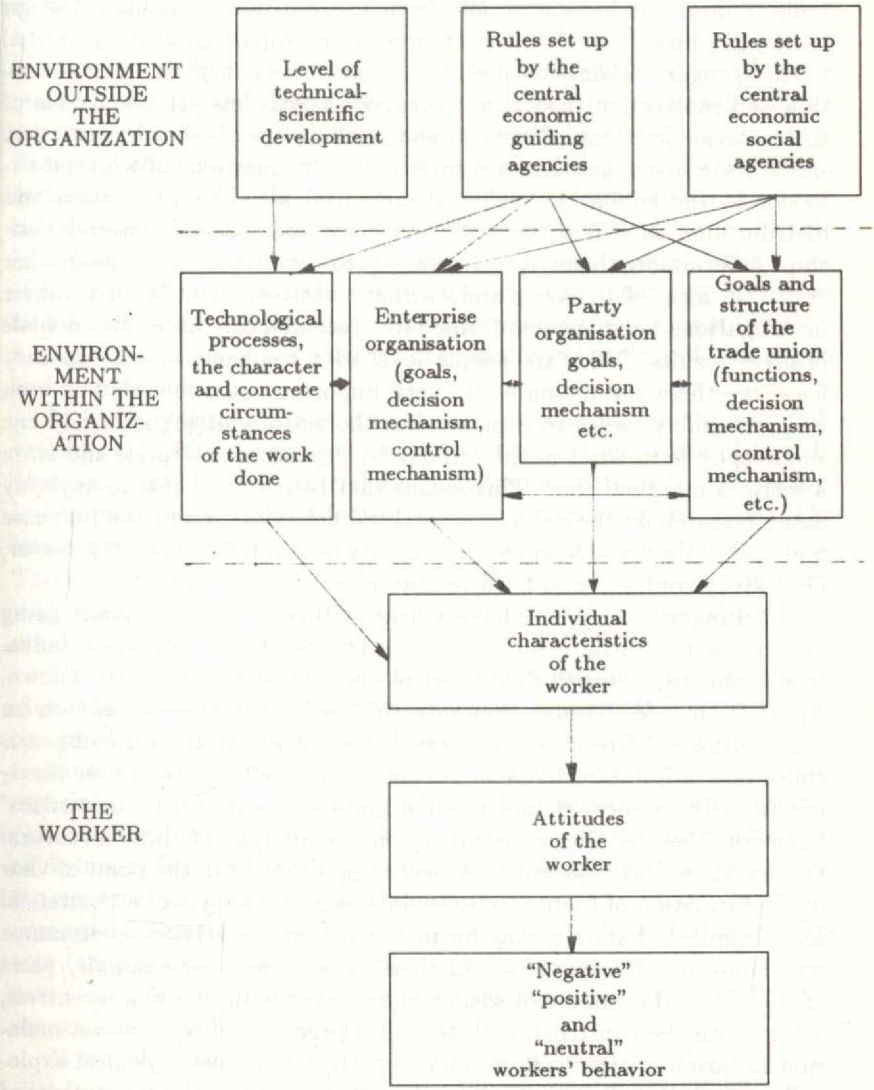
At the same time, certain factors of the indirect environment undoubtedly also exert an influence on the behavior of the individuals working in the enterprise. This is because this organization is by no means a closed, isolated system. Under socialist conditions, with a centrally planned and guided economy, the goals, set-up, and operation of the whole system are strictly delimited by the central economic and social agencies. The impact of the central measures (direct instructions or indirect rules) on the individuals and groups within the organization is an indirect one, and materializes through the internal organizational structure. At the same time, a significant measure of determinism is also due to the given level of technical development, which can not be ignored in establishing the enterprise or in laying down its operational principles. The behavior of the workers of the enterprise is demonstrated by means of a theoretical scheme in Figure 1.

The question arises: Which insufficiencies of the practical operation of the organization may have elicited the types of behavior mentioned in the introductory part of our study that deviate from, or are opposed to, the organizational goals? In other words : At what point and to what extent has the practical operation deviated from the theoretical scheme deemed to be correct?

Being aware of the prominent role assigned to the control mechanism by the theoretical scheme, we wanted to proceed along this line by starting to analyze the background to the "troubles". The shortcomings may be the following.

The payment-by-results principle does not prove workable in the most important element of the control mechanism, the system of material incentives. Incomes are rot related to the work done, at least not in adequate proportion. In another important element of the control mechanism, the promotion system of the organization, the payment-by-results principle is not observed either. The application of non-economic incentives (the socialist brigade movement, the institutions of participation) is formal, devoid of any real content. It is these questions that we shall be concerned with—after some considerations related to the practical approach to the types of workers' behavior—in Chapter 2 of our study.

Figure 1: The Derivation of Workers' Behavior from the Theoretical Scheme of Enterprise Functioning



Considerations Related to the Approach to Workers' Behavior

In our complex investigation of workers' behavior we set out from what was available on the subject concerned: from the small and chaotic body of domestic knowledge and from the immensely abundant foreign material, whose content, however, was in no proportion to its quantity.

In Hungary, owing to the already mentioned neglect of organization and motivation theory, no complex analysis has yet been made of the behavior patterns of workers and work-groups. No work exists that would have investigated in a complex way the questions of workers' behavior in the two major fields of industrial activity—production and distribution—as well as the system of social and economic interrelationships determining them. Research has been conducted on one or another "critical" form of behavior and on their motives. Thus labor turnover investigations have become fashionable recently, but have offered little positive results. Why are people loyal to a company, or why do they leave it—these are undoubtedly very important questions and as such unquestionably useful to explore. But the act of quitting is merely one single episode in what people do day by day at an enterprise and is, in a sense, a marginal case. This means that little is available to anybody doing research on the subject of workers' behavior, except the immense material in the possession of some experts in that field which is, however, necessarily confused and hard to obtain.

In Hungary, few people have a clear picture of what is actually going on—below the surface—in a factory. This is true even if some industrial problems, owing to their order of magnitude, are commonly known. Apart from a few studies concentrating, as in the case of research on labor turnover, directly on workers' behavior, material on the object is concerned only indirectly with people's actions at the enterprise. Starting from the unproved and often disputable assumptions on workers' behavior, these studies concentrate on the analysis of those structural factors whose development they deem important from the point of view of the formation of human actions. In this group papers of a theoretical and technical character may be included that are related to economic and non-economic incentives in their broad sense, for example, parts of the political economy of socialism corrected with material incentives, writings on the constructional, technical problems of economic stimulation in business organization; and sociological and psychological explorations and directives concerning the development of the institutions of

industrial democracy, socialist collectives, and democratic styles of management. All these are indisputably valuable and useful in themselves. The cases described above provide a good illustration of the fact that the behavior of workers and changes are centered around the operation of material incentives, around money. But these studies are deficient in one respect: they wish to concentrate on and to elaborate alternative solutions to problems for which they have no information of adequate quantity, quality and depth. A contribution to filling that gap may be expected of industrial sociology, which, partly by collecting the experiences of those acquainted with factory life, and partly by acquiring, systematizing, and evaluating its own body of information, is in a position to meet that expectation. In our investigation we tried to disclose in a plant unit of a large, provincial engineering enterprise the types of behavior of workers and work-groups, and the underlying system of micro- and macro-sociological factors determining them. Our study gives a complex analysis of the patterns of behavior in the field of production and distribution.

In some countries, investigations of a similar nature are quite advanced. Therefore we got much useful assistance from works of French, American, and Polish industrial sociology, gaining primarily methodological inspirations but also adopting concrete statements and ideas. The latter were not automatically adaptable to Hungarian circumstances. There were views we accepted with modifications after collating them with reality and carefully deliberating them, but there were also a large number of views we did not accept.[10]

The critique of those domestic or foreign economic or sociological ideas that give, in our view, an erroneous, distorted, incomplete, or one-sided picture of workers' behavior and of the interconnections determining it will be a recurrent feature in our study. We wish to argue especially with those who treat workers' behavior as an undifferentiated phenomenon, on the one hand, and on the other with those who wish to deduce it from one single structural factor or group of factors. Thus, for example, the latter attach absolute importance to certain material-economic factors (e.g. economic incentives), or to ideological–social factors (shop-floor democracy, workers' participation, socialist consciousness, etc.), or, regard the micro-life of the enterprise as separate from macro-society and macro-economy.

What we found most efficient in investigating the subject was to gather the greatest possible variety of information about all workers of

one single closed unit of work organization and to present thereby a picture of the various patterns of workers' behavior and of the system of related socioeconomic interrelations. This was a kind of "exploring in depth" method, as opposed to the "digging in width" method.

This many-sided method of investigation was imposed on us by the prevailing circumstances. By the full-scale character of investigation we could avoid the confusing task of representative sampling. Because if the researchers analyzing a subject are not informed systematically, and in detail about the variables to be studied, an *ad hoc* determination of the representation is hopelessly subject to risks. But this information cannot be obtained without any previous empirical research of a similar nature. At the same time, the small size of the sample made it possible for us, even with our very limited capacity, to encompass and study a mass of variables. It enabled us to get acquainted with the subject by various methods of collecting information: we applied simultaneously questionnaire interviews, unstructured interviews, enterprise data and document analysis, and so on. These provided not only complementary, but in many respects overlapping information, which made it possible for us to reduce to a minimum the errors inevitable in the case of small samples, and to correct ourselves continually. All this did not, however, eliminate the drawback of the method: Though the results are fairly objective, they are of a rather limited validity. Therefore we tried to avoid any exaggerated generalizations in our study.

The site of our investigation was a factory unit of an enterprise manufacturing railway coaches by means of traditional technology, in particular producing the so-called casings of railway coaches. Four hundred manual and nonmanual workers were employed. The factory unit had two workshops: the component-producing workshop and the assembly hall. In the first, machine operators, component fitters, and welders cut up, formed, and prepared the angle bars, the metal sheets, and component parts. In the second workshop these were assembled, also by fitters and welders. Here the neatly curved frontal parts and the long side parts with empty openings for windows and doors were manufactured, as well as the arched roofs of coaches out of which,the casings were mounted, with the assistance of cranes, on the ready-made chassis. In a separate workshop of the assembly unit the sheet-metal workers were working. They performed the last phase of the unit's work—the levelling of the casing sheets.

The majority of the workers were fitters and welders. There were

about 20 component and 80 assembly fitters, the same number of welders, and 60 sheet-metal workers. There were a smaller number of machine operators, rust cleaners, grinders, and auxiliary personnel named after their group leaders (e.g. Cziffra, Ferenczi, Engel, Honner, etc.). One or several work groups constituted a so called socialist brigade—a basic unit of the work emulation movement.

Our field work was done largely in the spring of 1969 and our aim then was to survey the then prevailing static state of affairs. By means primarily of questionnaire and unstructured interviews we gathered a large amount of information about workers' behavior related to production and distribution. It appears, however, that we were unable to properly process all that material. Therefore, in 1969–70 we focused our attention on the analysis of the types of behavior connected with distribution (the payment-by-results principle, differential wage rates) by processing the information collected in the field work and the large amount of data and documents from the enterprise files.[12] It was only after this phase of work that the much more intricate and elaborate analysis of the production aspects of workers' behavior could be undertaken. By that time we had already extended the scope of our investigations also in time, so that they covered, as far as the available documents allowed, the most important variables of the state of affairs both before and after 1968–69. We examined the changes in the major indicators over an eight-year period (as far back as 1962) and kept track of the development of events up to the time of completing our study.

Notes

1. We have discussed the case of sheet-metal workers in a separate study: L. Héthy and Cs. Makó "Munkateljesítmény, érdek, hatalom, környezet" (Work Performance, Interest, Power, Environment), *Új írás*, 1971, No. 2.

2. In terms of organizational theory, our present study owes much to the following works: A.Etzioni, *Modern Organizations: Foundation of Modern Sociology Series* (Englewood Cliffs: Prentice-Hall, 1964); J.G. March and H.A. Simon, *Organizations* (New York: Wiley, 1958).

3. The basic works of the scientific management theory are: F.W Taylor, *Scientific Management* (New York: Harper, 1911); L. Gulick

and L. Urwick, *Papers on the Scientific Administration* (New York: Columbia University, Institute of Public Administration, 1937, etc.).

The basic works of the human relations approach are: E. Mayo, *The Human Problems of Industrial Civilization* (New York: Macmillan, 1933); F.J. Roethlisberger and J. Dickson, *Management and the Worker* (Cambridge: Harvard University Press, 1939); F.J. Roethlisberger, *Management and Morale* (Cambridge: Harvard University Press, 1947, etc.).

4. A. Touraine, *La société post-indusrielle: Naissance d'une société* (Paris: Éditions Denoël, 1969), p. 203.

5. The term *enterprise quadrangle*, including the leader of "KISZ" (Young Communist League), is also commonly used. We do not find it justified here to treat the KISZ organizations separately from the party organizations.

6. It would be a mistake to consider the application of the principles of Taylorism or of the human relations approach a kind of conscious process. Economic management at our enterprises is largely carried out instinctively, and rationalism that can be, and is, formulated in principles—the rationalism of Taylorism or of the human relations approach—appears in its totality rather than with certain individuals; as a result of its use in practice, it also finds its reflection in theory. The same also applies to the workers' actions described in this study. In the case of certain collectives or individuals, a large-scale inclination to instinctive action can often be experienced, which in its totality, however, embodies a kind of higher rationalism.

7. R. Mayntz, *Az ipari üzem társadalmi szervezete. Az üzem informális szervezete és annak elemei. Üzemszociológia.* (Social organization of the industrial enterprise. The informal organization of the enterprise and its elements. Industrial sociology) (Budapest: Közgazdasági és Jogi Könyvkiadó, 1969), pp. 91–111.

8. E.Mayo, *The Human Problems of Industrial Civilization* (New York: Macmillan, 1933); quoted by M. Bolle de Bal, *Relations Humaines et Relations Industrielles* (Bruxelles: Univ. Libre, 1967), p. 42.

9. K. Lewin, *Group Decision and Social Change*; R. Lippit and R.K. White, *An Experimental Study of Leadership and Group Life*; L. Coch and J.R.P. French, *Overcoming Resistance to Change*. All three studies are included in *Readincs in Social Psychology* (New York: Holt,1952).

10. The works of the following authors have been especially helpful to us: Michel Crozier, Alain Touraine, Bernard Mottez, Claude Durand, Marcel Bolle de Bal, Melville Dalton, William F. Whyte, George C. Homans, and the American authors mentioned in the text as well as the sociologists Kazimierz Dóktor and W. Weselowski.

11. In the present study we summarize our results related to fitters, and only make references to the other skills. Doing so, we hope that our arguments do not lose much of their weight and that we can avoid making superfluous detours.

12. An account of the results of our work has been published in our study: *A teljesítmények érvényesítése és az üzemi érdek- és hatalmi viszonyok* (The assertion of the principle of payment-by-results and the interest and other relations at the enterprise) (Budapest: Publications of the Research Institute of Sociology of the Hungarian Academy of Sciences, 1970).

2 Functioning of the Enterprise's Control Mechanism and Workers' Behavior

The problem of "negative" workers' behavior at the engineering enterprise in western Hungary constituting the subject of our study was at its height in 1967–68.

In the factory unit where we conducted our research from 1968 on the output indicator began to show a large-scale fluctuation in 1967 despite the relatively even production plan envisaged by the management. The fluctuation was 35.3 percent in 1967 and 37.8 percent in the following year, more than double the value experienced in the preceding five years. The greatest fluctuation (76.7 percent in 1968) was observed with the performance of the sheet-metal workers, but similar phenomena could also be witnessed in the case of the assemblers and component fitters. The output fell in the second quarters of both 1967 and 1968, which could be remedied only by strenuous efforts in the remaining parts of the two years. Added to the difficulties was another typical form of "negative" workers' behavior: the labor turnover increased vigorously in 1967, and even more so in 1968 and 1969. During eighteen months (in 1968 and the first half of 1969), 46 percent of the sheet-metal workers, 34 percent of the assemblers and 47 percent of the skilled component workers left the enterprise. In the case of the welders and the machine operators the situation was no better. The labor turnover equally extended to skilled, semiskilled, and unskilled workers, as well as to the core and the auxiliary workforce. There were work groups whose membership was practically renewed.

In this part of our study we wish to take the first step toward complementing and specifying in detail the public opinion about workers' behavior and, as a result, induce a certain refinement and revision of the theoretical concept of enterprise operation. Our subject of study is the relationship between the functioning of the control mechanism of the enterprise and workers' behavior. This seems all the more important as, in our view, without a reorientation in this matter there is hardly any chance of overcoming the economically and politically harmful "negative" workers' behavior and the industrial difficulties.

The theoretical concept of enterprise operation presupposes a direct and one-way relationship between the control mechanism and the patterns of workers' behavior. Setting out from Tayloristic foundations,

this means that the deficiencies of economic incentives, injust distribution by results, lack of an adequate wage differentiation, etc., are made responsible for systematic work dodging, careless work, moonlighting, unjustified absenteeism, and excessive labor turnover. The problem is interpreted similarly by the adherents of the human relations approach, which derives people's activity as deviating from or opposed to the enterprise goals from the backward development of shopfloor democracy, from the excessive practice of autocratic management methods, from the narrowing of professional and promotional perspectives, and from the insufficiencies of other noneconomic control elements. What the two approaches have in common is that neither transgresses the control mechanism, and virtually both see a direct relationship between the latter and human action. A combination of the two approaches, although no doubt a step toward refined differentiation, still preserves the concept of direct interaction. What characterizes the interrelationships described by the theoretical concepts of enterprise operation is their one-way nature. One of the two interrelated factors always fulfills the function of cause, the other that of effect. According to such assumptions, the deficiencies of economic or noneconomic incentives inevitably elicit various forms of "negative" workers' behavior. But no mention is made of the effect of workers' behavior on the control mechanism, and how it contributes to the emergence and survival of distortions.

This perception of relationships gives rise to illusions regarding the assessment of the situation and the possibilities of solving it. For the elimination of the "negative" patterns of workers' behavior it is thought to be sufficient to improve the control mechanism, with this improvement being realized by simple administrative intervention (by establishing new wage systems, by improving the formal institutions of democracy, etc.). Contrary to that, we assume that the connection between the operation of the control mechanism and workers' behavior is a close but not a direct or a one-way one, but rather an indirect relationship in which both action and reaction assert themselves equally. To prove our statement we follow this logic:

1. We shall investigate the relationship between the control mechanism and workers' behavior, namely the extent to which the distortions of economic and noneconomic incentives provide an explanation for "negative" workers' actions. Insofar as this explanation is not satisfactory at all points, the relationship is not be a direct one.

2. We shall set up our own ideas concerning the system of factors determining workers' behavior, including the indirect relationship between the workers and the operation of the control mechanism. We shall do this in such a way that we gradually proceed from concrete factors (from factors influencing the economic and noneconomic environment) toward abstract determining categories (interest and power relations, transactions). (See Chapters 3 to 8).

3. Returning to the relationship between the control mechanism and workers' behavior, we shall examine the mechanism of reaction. (See Chapter 9.)

4. After this we shall discuss the alternatives put forward in Hungary for the elimination of "negative" workers' behavior experienced at our enterprises.

Economic Versus Noneconomic Incentives

Domestic approaches to workers' behavior, as has been pointed out above, overemphasize the role of both economic and noneconomic incentives, confronting with one another the important elements of the organizational control mechanism. There are more realistic views, too, which have recognized that economic and noneconomic incentives are of a complementary nature, just as man, constituting the "subject" of incentives, is not merely an "economic" or a "social" being, but both at the same time.[1] But this latter approach also fails to fully determine the complicated interaction between economic and noneconomic incentives and the sequence of importance within that relationship. And the standpoint that "this is important, that is also important" hardly provides a secure foundation for the establishment of an efficient control mechanism.

As regards the control mechanism, it is perhaps the most unequivocal conclusion of our research that the role of money—both as an economic and as a noneconomic incentive, i.e. as a prestige symbol—is dominant. The workers at the enterprise under discussion, in their overwhelming majority hard-working people of agricultural origin, attached fundamental significance to wages in the factory unit ("Money comes first." "We do not come here to produce railway carriages but to earn a living." "There are rather hungry people here, if they make a lot of money, they

want even more.") These program-like declarations were, as we shall see in the subsequent parts of our study, strongly reflected in the people's actions. Wages were fundamental to workers for ensuring the well-being of their families, but also as a measure of their prestige in the eyes of both their fellow workers and managers, and also of people outside the factory. This is numerically evidenced by the following example: when the enterprise in certain months of 1967–68 set target bonuses to stimulate the efforts of its working population, the level of output exceeded that of the previous months by 9 to 16 percent. Among those who left the enterprise, the majority of those asked by us referred to earnings as the reason for their decision. This also applied to the functioning of noneconomic incentives. A significant part of the work groups used, for example, primarily their participation in the socialist brigade movement as an "ideological" argument for their tactical action to force higher wages.

We cannot agree with the view that the tendency of "money-mindedness" was due to the economic reform of 1968. Rather, we are of the opinion that the economic reform realistically recognized the existence of this tendency not unknown in the past, and started to bring about those micro- and macro-economic conditions that, together with further measures, will presumably make it possible for this tendency with its past destructive effects to fit in with the general concept of socioeconomic development and to promote development. To prove that this "material" tendency also existed in the past, we wish to use two examples.

In the 1950s, when great importance was attached to noneconomic, "moral" incentives (work competition, the Stakhanovist movement, etc.), the piece-rate system—held to be a typically "socialist" wage form—was also extended to the transport workers at the enterprise under discussion. The workers earned their wages according to the amount of material transported. Money was paid only against a weighing certificate, and the weighing bridge was at a remote gate of the factory. Once the transport workers needed to move a heavy working bench by one meter. Normally, a few workers would have been able to move the bench with a strip of belt. Instead, the workers put the bench on a lorry, took it to the bridge for weighing, and then, returning from the long haulage, put it back one meter from its original place. Though a glaringly irrational action, producing a weighing certificate was the only way for the workers to get their money.

Another case also happened in the 1950s, at a Budapest house-

building enterprise. The electricians worked in a piece-rate system: they were paid according to the number of flats whose electric network they had installed, or according to the length of wire used (their length was specified by flat). The workers, considering their rate too tight and wanting to "make big money", worked out a more favorable method. Essentially, they installed a much shorter length of wire than prescribed, and in such a way that it could not be detected by routine supervision. As a result, the performance percentage (and with it the wages) rose steeply, and the electricians regularly took home the extra wires, becoming "redundant". The only problem was to make the wall tubes disappear, since the workers were unable to take them home from the construction site undetected. And their "savings" of this kind after all amounted to several hundred meters. Fortunately some sewer construction was carried out in the neighborhood. When the ditches had to be filled up, several workers threw the tubes into the ditches early in the morning, covered them cursorily, and during the day the bulldozers removed all traces.

While it is possible that "money-mindedness" was of a lesser degree in the 1950s than nowadays, it has certainly increased since, most by owing to the fact that the commodity supply in the consumer market has greatly increased in terms of both quantity and quality. It is natural that as long as people can spend their money only within very narrow limits, if at all, the incentive power of money is very small. However, as soon as a more differentiated consumption becomes possible, the incentive power of money grows.

The existence of the power of money is supported by the results of extensive foreign research, too. The two American researchers, Walker and Guest, pointed out that owing to a wage differential of about 30 percent, steel workers exchanged their relatively varied, autonomous work providing professional development, for assembly-line work in which all these aspects were missing, but which paid more.[2] According to the French researcher Durand, the workers of the largest automobile companies (Renault, Peugeot, Berliet, Chausson) expected of the French events of May 1968 primarily higher pay, better social benefits, and shorter working time, and required more "participation" in the affairs of the companies only to ensure that all these demands were materialized.[3]

The arguments and examples cited, along with stressing the dominant role of money, also contain a clear reference to the fact that the role of noneconomic incentives, although not completely separable from

money (prestige symbol) and undoubtedly complementing the functioning of economic incentives, is already of secondary significance today. This is not refuted by the examples, which prove that the existence of coherent collectives, or the application of democratic management methods, may give a boost to productivity. They may, but not necessarily! As pointed out by Seashore, coherent collectives produced either above or below the average.[4] (A good example is also the case of the sheet-metal workers discussed by us.) Similarly, as shown by Pelz,[5] the behavior of foremen, their democratic or autocratic style of management, may result in very good or very poor output. With some caution we may risk the statement, which shall also be proved, that the existence of coherent collectives can only increase productivity if the workers agree with the enterprise on the wage issue. If, however, there is a conflict about this, it is the coherent collectives that put a brake on performance. In the same way: if the foreman has the possibility to reward the activity of his men materially, and if he does so (i.e. if he has the power to do so), the democratic management methods may lead to excellent results, but if he has not the power, they are completely ineffective.

Formulated in a sharp way: wage conflicts have never been resolved by referring to the workers' noneconomic demands, while the non-satisfaction of these demands could generally be compensated for by money (true, often by a very large amount of money). Here is where the significance of the role of noneconomic incentives lies, although of a secondary rank. If due attention is paid to them, a rational quantity of money will suffice for the purposes of economic incentives.

After these preliminary remarks, let us examine how the control mechanism functioned at the factory under investigation.

The Functioning of Economic Incentives

In an enterprise the actions of individuals, groups, or strata can coincide with the organizational goals only if harmony, a compromise, or (what is most desirable) integration is brought about between the goals and interests of the organization and the (primarily economic) goals and interests of the people working in it. This presupposes the assertion in economic incentives of the principle of distribution by results, of the performance principle. This is needed to ensure that people enjoy economic advantages that are relatively proportionate to their contribution to the success of the organization, to the measure of their "burden-bearing"

capacity, and that their interests and those of the enterprise come closer to each other, being a basic condition for reaching a compromise.

An enterprise is a complex whole that is made up of integral constituent parts and follows a strict internal logic in its operation. Therefore, it is not sufficient for the promotion of a many-sided compromise of interests to urge and realize rewards and penalizing measures in proportion to the work done only in individual isolated fields. The principle of payment by results must permeate through the whole functioning of the organization, must be valid in all possible relations. Thus, in the present examination of the operation of economic stimulation it will not be sufficient either if we analyze, say, the proportions of individual outputs (capabilities) and wages merely within selected work groups or skills. Thus is undoubtedly necessary to be kept in mind, but in addition it is absolutely indispensable to explore how distribution by results has been achieved among groups within individual skills, among various skills in the factory unit, between piece-rate workers of the given unit and time-rate workers of other units, and between the workers and employees of higher hierarchical levels (lower or higher leadership) of the factory unit.

Following this train of thought we may proceed toward more comprehensive relationships, toward still higher spheres. It is, for example, extremely important and interesting to consider how the "performance principle" prevails among individual companies within the engineering industry, and how the combined production of managers and workers of the individual enterprises compares to the volume of economic advantages enjoyed by them in various forms. The aim and scope of our study do not allow us to carry out a thorough analysis of this question, but it is inevitable for us to touch it.

If we put in the center of our analysis the principle of distribution by the work done, we must consider both its inseparably connected elements: work (human labor input) and distribution (the economic advantages accruing to man, output). Reliable conclusions cannot be drawn from the mere analysis of either wage proportions or the proportions of the work done. We find it important to emphasize this, as it has become fashionable among specialists to consider and assess the enforcement of the performance principle only on the basis of the easily traceable earnings proportions rather than on the basis of the combined values of work and earnings. The rate-setting policy pursued by the enterprise's staff department was a typical manifestation of this method, leading to disproportionate higher earnings in piece-rate areas as compared to the

earnings in time-rate areas and those of the nonmanual staff, thereby causing wage disparities. This reasoning might be accepted if the proportions of the work done were also taken into consideration. But no mention was made of the latter. The practice, however, of giving prominence to the element of distribution and neglecting the element of work achieved is characteristic not only of the enterprise under discussion. It can be experienced on a nation-wide scale. In intellectual circles, for example, it is a frequent complaint that "a simple manual worker" earns more than, say, an engineer. In a certain respect, this may undoubtedly be justified, yet we cannot accept it in the majority of cases. On the one hand, those who are complaining generally have no idea of what the "simple manual worker" really does, with what effort, and under what circumstances. On the other hand, what these people generally appreciate is not their actual work but their professions as testified by their diplomas. Moreover, engineers or economists working in the functional department of a company often perform clerical tasks far below the level of their professional qualifications and sometimes with very doubtful efficiency.

While it is easy to assess relative wage rates, taking into consideration performance requirements is a very difficult task because even in small or medium-size business organizations the work tasks display such qualitative and quantitative differences that even plant managers with local knowledge and experience may find difficult to assess. In order to find a way out of this chaotic situation, we did two things: First, in assessing qualitative differences between the tasks assigned to the individual skills within the factory (sheet-metal workers, assemblers, component fitters, etc.), we relied on the most competent and most experienced experts, on the workers and foremen themselves. Second, we laid down as a basic principle that wages can reflect the inputs correctly only if the requirements of quantitative performance of work intensity in all fields of work, irrespective of qualitative differences in performance, are at the same level. (Theoretically, this assumption may be contradicted if the enterprise "rewards" the qualitatively higher level of work not by more money, but by looser quantitative requirements. In such a case, the validity of the principle of distribution by results is changed. Practically, however, this possibility does not exist, for the simple reason that the enterprise had no exact information as to the individual fields of work, neither about the qualitative nor the quantitative performance requirements.)

The question as to the extent to which the functioning of the insti-

tutional forms of the economic incentive system can put into practice the principle of distribution by results can be approached from two aspects. One is the possible scale of wage differentials, the other the wage rates within that scale. The requirements on the two aspects for the realization of the distribution by results cannot be separated from each other.

On the one hand, the range of wage differentials determined by the various institutional forms of incentives must be broad enough for the wage differentials within that scale to adequately reflect the order of magnitude of the deviations in performance and production by individuals, work groups and skills that may arise as a result of the changing work requirements, or their own changing ambitions, endeavors, or physical and intellectual capabilities. Only the adequate scope of that scale may give the workers a "material perspective", that is, the hope that increased efforts or other standards (as, for example, growing skills level, length of service, etc.) may lead to a continually better economic situation, and an ever better way of life. Possibly the size of the wage differential "accessible" by workers is one of the keystones of the efficiency of the incentive system. The maximum attainable wage differential must necessarily be greater than the so-called incentive threshold, which still induces workers to improve their production results. As money equally satisfies material and prestige demands, two variants of the incentive threshold have to be reckoned with: the material incentive and the lower prestige-incentive threshold. The existence of the latter shows that the workers and their groups react very sensitively also to wage rises which do not cause appreciable difference in their living standards, that is, to materially nonincentive wage rises. The scale of the wage differential is, however, not wide enough to reflect also in money terms any deviations in achievement or in competence. The problem that arises for the enterprise management is whether it has sufficient resources to apply rewards and sanctions with due efficiency.

On the other hand, the implementation of distribution by results requires that the set-up and operation of the various institutions of economic incentives within the given scale of wage differentials (wage systems or their individual elements) are suitable to express in wage proportions, above all, differences of people's actual quantitative and qualitative performances.[6] As we are concerned with the behavior of the workers of one factory unit, we also concentrate the analysis of the operation of economic incentives on this single area, and give only a sketchy

outline of the broader enterprise and national relationships. It is neither our aim nor do we have the possibility to provide a comprehensive analysis encompassing the economic set-up as a whole.

Forms of payment

The institutional forms of the incentive system are designed to realize the distribution by results within the enterprise. These forms, adjusted to the characteristics of the individual sectors and separated by the division of labor or the division of functions, have different varieties even within one enterprise. The collective contract of the enterprise surveyed (despite the fact that it tried to avoid a detailed discussion of specific cases), distinguished about seven main wage set-ups only for the group of manual workers. But all these may be reduced to two basic wage forms: time and piece rates. In the case of time rates the basis for payment is the number of hours spent in regular working time (which does not exclude, of course, the existence of certain performance requirements), and in the case of piece rates, the workers' performance. In the factory units under investigation there existed variations of both basic forms of payment. The payment of technical or clerical employees (monthly "fixed" salaries) was in fact a variety of the time-rate system. Since the wage system ensuring the basic pay of manual workers and employees is rather intricate in itself, we shall refrain here from discussing, in spite of its importance, such an additional source of income as overtime. In the factory units discussed here, the workers were involved in a group piece-rate system, with the size of the common wage fund of the group depending on the "number of products turned out" in the accounting period (for example, on how many front pieces were produced by the group of skilled assemblers, or how many railway coaches were "levelled" by the sheet-metal workers). The wage fund increased or decreased in proportion to performance. There was neither a ceiling on wages nor an assured lower limit. Thus the operation of the wage system was, in principle, the simplest possible: "as many forints as pieces." Yet the actual practice prescribed by institutional forms was by far not as simple as that. But it was the very institutional regulation without which neither the functioning of the performance principle could be traced, nor the origin of the troubles in the factory unit could be found.

The basic wages of people working in the work groups were determined by three important factors:

- piece rate,
- job grade, and
- personal wage rate.

The piece rate and the job grade jointly influenced the level of the group's common wage fund, while the personal wage rates determined the personal wage level of the individual workers.

The group's wage fund resulted from the product of the number of standard working hours performed and the wage rate of the job grade related to the tasks carried out. The piece rate was the performance requirement in time set by the enterprise (standard per hour, minute). The wage rate, however, of the job grade related to the work task fixed the amount of money to be paid for one standard working hour (minute). Hence, the group's wage fund, illustrated by a simple example, was established as follows: Given is a ten-member work group producing one hundred pieces of railway coach components per month. The time set for manufacturing one piece of the coach component is 24 standard working hours. Thus the number of hours spent by the group is 2,400. The wage rate of the job grade related to the manufacturing of product X is 10 forints. Hence, the wage fund produced by the group is 24,000 forints. It also clearly follows from the above that in ensuring earnings proportions between the work groups and skills performing the various work tasks, corresponding to the performance principle, a prominent role was played both by the piece rate and the job grade.

The groups' performance percentage, the index clearly reflecting the efforts and earnings of the groups, resulted in fact from the proportion of the standard working hours performed and the hours spent working. The workers of the ten-member group in our example in the course of the month spent 200 hours per capita working, that is, a total of 2,000 hours. The number of the input of standard working hours was 2,400. Hence the performance was 120 percent.

The wage fund earned jointly by the group was not distributed evenly among the members but in proportion to their personal wage rates. The forint value of the personal wage rate was merely a proportionate figure that (unlike the time rates) did not coincide with the individual's hourly earnings. The latter, depending on the size of the group's wage fund

and on the relative height of the individual personal wage rate, might have been either lower or higher than the forint value of the personal wage rate. The personal wage rate regulated the earnings proportions within the group in such a way that, for example, a "nine-forint man" always earned one and a half times more out of the group's common wage fund than a "six-forint man". (If in the group cited as an illustrative example, 5 workers had a 9-forint and 5 workers a 6-forint personal wage rate, the monthly earnings of the former amounted to 2,880 forints and those of the latter to 1,920 forints. The earnings per hour of the former—on the basis of 200 working hours—amounted to 14.40 forints, those of the latter to 9.60 forints.) Hence the personal wage rate was destined to maintain among the individuals within the group the earnings proportions corresponding to the performance principle.

To ensure the application of the principle of distribution by results for the salaried staff and the manual workers, the various skills, work groups, and individuals alike, three factors of the piece-rate system (piece rates, job grades, personal wage rates) in themselves and also in compliance with the other fields of the wage system ought to meet the following requirements:

1. The piece rates ought to be well-founded with respect to each work task (their levels have to be in harmony with the level of the habitual and generally accepted but not precisely definable performance requirements which the company has set to the workers paid on a time basis and for the office and managerial staff).

2. The job grades and the related wage rates must objectively reflect the differences that exist in relation to work tasks, specific skills, work groups and individuals.

3. The personal wage rates ought to adapt themselves flexibly to the demand made by work on individuals, their efforts, endeavors and ambitions. (At the same time, the job grade and the personal wage rate had to be in compliance with those incentive factors that, for similar reasons, influenced the earnings of people paid by time and of the white-collar staff.)

To all this, the special requirement was added that the possible range of wage differentials should be adequately wide.

In the enterprise under investigation, the possible range of wage differentials, embodying material perspectives, prospects of the workers' growing well-being and the volume of resources available to the enterprise management for applying rewards and sanctions, was not wide enough. To be more precise: it was adequately wide theoretically, but not in practice.

The unobjectionable performance-oriented piece-rate incentive system without any ceiling on wages ensured, in principle, an unrestricted scope for the skills, work groups and individual employees of the factory unit to get compensation in money for their efforts, however assiduous they might be.

But it was hamstrung by the piece rates specifying performance requirements. The leadership of the enterprise discussed here (unlike other Hungarian engineering companies that consider piece rates to be taboo and try to hide their slackness, amongst others, by setting a performance ceiling) regularly and openly tackled the problem of piece rates. In the period of 1960–1969, performance requirements in the factory unit were made six times tighter. Their measures were 19.3 percent in 1969, 6.9 percent in 1966, 9.4 percent in 1965, 10.4 percent in 1964, etc., with the latest revision being made in 1971. While this in itself was a correct and positive phenomenon testifying the large-scale dynamism and initiative of the enterprise, the real problem was the method applied: the enterprise management cut back the performance of all skills uniformly and mechanically to 108 percent, irrespective of the diligence and abilities of the collectives and of the individuals and without any consideration of the tightness of piece rates. Thus the very doubtfully objective indicator of the performance level attained was used as a basis of revision. This practice of piece-rate policy involved the tendency of a vigorous levelling off of wages and put the attainable wage differentials within substantially narrower limits than the possible measure of the wage differentials between skills and work groups. Under such circumstances, the skills and work groups largely lost their material perspectives as they feared that the enterprise would "reward" their outstanding output by "substantially tightening" its performance requirements.

The-development of the job grades also displayed a wage-equalizing tendency similar to the situation of the piece rates. The managers of the labor department complained that in the past few years the highest and

the lowest (the best- and the lowest-paid) job grades, thus grades VIII and I, had entirely disappeared, and the number of jobs graded VII and II had also fallen.

In the specific wage system of the factory unit—from the point of view of the individual's economic perspective—an important role was played, apart from piece rates and job grades, also by the personal wage rates, which regulated the earning rates within the work group. The theoretical range of differentiation between personal wage rates as laid down in the rating system of the collective contract suffered an appreciable contraction in practice. It is worth noting that, for example, the actual minimum (7.50 forints) of personal wage rates in the case of skilled sheet-metal workers significantly exceeded the officially allowed actual minimum (6.50 forints) of personal wage rates, and the actual maximum (9.90 forints) was far below the official maximum (12.50 forints). This phenomenon is clearly demonstrated in Table 1, compiled on the basis of the personal wage rates of sheet-metal workers and of assemblers.

On the basis of which factors did people's personal wage rates rise, and which factors were determined for their economic perspectives? According to our experience, the following three factors were important:

- length of service,
- professional skill,
- individual ambition and diligence.

The material in Table 1 points to a ranking order. The average personal wage rates of skilled sheet-metal workers developed according to the length of service as follows: for those with a duration of employment ranging from half a year to 5 years it was 7.82 forints, from 5 to 15 years 9.10 forints, and with a service time of more than 15 years 9.76 forints. The difference between the two extreme values was 1.94 forints. The average personal wage rate of skilled sheet-metal workers was 8.71 forints, that of semiskilled sheet-metal workers 8.46 forints. Hence, the difference between them was 0.25 forints.

With the dominant, determining role of seniority and with the secondary role of professional skills, there was little possibility for a third factor, often independent of the two, namely individual ambition and diligence, to find expression in personal wage rates. In the case, for example, of skilled sheet-metal workers with more than 15 years of employment, the maximum personal wage rate was 9.90 forints and the

Table 1: The Range of Wage Differentials for Sheet-Metal Workers and Assemblers

Possible range of wage differentials (forints)	Frequency of actual values	
	Person	Percent
5.50– 6.00	4	4.4
6.10– 6.50	2	1.8
6.60– 7.00	7	6.2
7.10– 7.50	21	18.4
7.60– 8.00	16	14.0
8.10– 8.50	8	7.0
8.60– 9.00	16	14.0
9.10– 9.50	23	20.2
9.60–10.00	16	14.0
10.10–10.50	–	–
10.60–11.00	–	–
11.10–11.50	–	–
11.60–12.00	–	–
12.10–12.50	–	–
5.50–12.50	113	100.0

minimum 9.70 forints. (Despite the fact that the rating system provides for a lower wage limit of 9.00 and an upper limit of 12.50 forints for this job grade.)

Since length of service was the factor on which the rising perspective of the personal wage rate largely depended, it seems to be appropriate to analyze this factor more thoroughly. Personal wage rates rose in the case of skilled structural fitters (sheet-metal workers, assemblers, and component craftsmen) as a function of the length of service as shown by the data in Table 2.

Table 2 shows that after 12–14 years of employment at the enterprise, that is, up to an age of 30 to 32, the employees get 97.2 percent of their personal wage rate rise to be expected, on the basis of the situation prevailing then!

Looking at the incentive scheme applied by the factory unit, at the complex system of piece rates, job grades, and personal wage rates, from the point of view of the possible range of wage differentials, and of the economic perspectives of workers, we must state that the incentive sys-

Table 2: Development of Personal Wage Rates for Skilled Structural Fitters

Length of employment (year)	Rise in personal wage rates (initial value: 5.60 forints)	
	Forints	Percentage
0– 2	1.56	40.0
2– 4	0.32	8.0
4– 6	0.63	16.2
6– 8	0.38	9.7
8–10	0.11	2.8
10–12	0.65	16.7
12–14	0.15	3.8
14–30	(!) 0.10	(!) 2.8
1–30	3.90	100.0

tem did not provide an appropriate prospect for the workers' future. The piece-rate policy of the enterprise striving to fix the size of the group's wage fund, and thus a secure perspective for the employees, could be ensured only by the rise of personal wage rates. But this came practically to an end at the age of 30, thus the workers "ate their future" within a short period of time. And the lack of perspectives of rise strongly influenced, as we shall see below, the behavior of people. (The phenomenon is not a unique one. It appears with particular sharpness in the time-rate areas where workers' wages depend almost exclusively on the size of the personal wage rates, and the wage-rate system makes it hardly possible for the workers to resort to "tactics" and "manipulations' in the interest of more money. In one of our engineering factories in the countryside, 30 to 35 year-old workers, still in full possession of their physical and mental abilities, "practically stopped working" when they reached the maximum of their personal wages rates.)

The narrow range of wage differentials within the factory unit was closely related to a similar situation in the piece and time-rate areas, involving the manual work force and the white-collar staff. Similarly, the enterprise was unable to pay its workers performing more sophisticated skilled work nor the members of its lower- and even upper-management in proportion to their relative performance. Moreover, this phenomenon could hardly be independent of the fact that the national wage level

of the individual engineering companies was levelled out, irrespective of performance.

Incentive Factors

The individual incentive factors (piece rates, job grades, personal wage rates) were unable to bring about wage proportions related to the work done—partly because the incentive factors did not function as foreseen, partly because they were devised in a rigid way.

As regards the *piece rates*, the collective contract and the labor law lays down: "As performance requirement such piece rates must be applied as a worker or a group of workers of average capability, endowed with professionally and biologically (mentally and physically) appropriate and necessary practice, under adequate technological, organizational, hygienic and safety conditions as ensured by prescriptions, can lastingly fulfill in the regular daily working time, under the observance of quality, economic, health and safety requirements." The piece rate set according to the above considerations is the 100 percent standard.

The collective contract states: "Temporary and continuous piece rate surveys must be made because from the accumulation of the many small, imponderable measures (organizational and technological changes), from the continuous improvement of working conditions, from the rising level of skills and from the better utilization of the working time, such reserves and loose working methods develop that lead to a substantial overfulfilment of the set rate and thereby to wage disproportions. On this score, however, piece rates must not be changed more than once within a year."

In our factory unit, as has been pointed out, the enterprise management boldly and resolutely tackled piece rates without violating the formal rules. It carried out a repeated, annual or biannual tightening of piece rates, primarily with reference to the increased skills and practice of workers, while technical and organizational changes had hardly taken place over the past two decades. In 1969, for example, the enterprise emphasized that the delivery contracts concluded for several hundred units had been really beneficial to increasing the workers' skills compared to the previous small-batch production, requiring frequent change.

The argumentation of the enterprise was (at least formally) completely in order; its method, however, was subject to sharp criticism. The fact that the piece rate tightening was carried out mechanically on the basis of the performance percentage attained by improved skills, not taking into account to what extent the increased output was due

to the loosening of piece rates or to the above-average skills, involved not only wage equalization tendencies but also made it impossible to establish wage proportions reflecting the actual results achieved. Thus by this method the enterprise was unable to bring about an objective, well-founded rate setting. The levels of the performance requirements showed impermissible fluctuations by work tasks, by skills, work groups even as a function of time.

In the period of our research activities, two types of railway coaches were manufactured. For one of them the enterprise set such a tight piece rate that, in the opinion of the workers, it was impossible to earn "a glass of cold water". The workers were literally afraid of this type, which fortunately constituted a minor part of the products manufactured by the unit. When the enterprise decided to produce a larger quantity of that type, the so-called "trailer disease" broke out, which meant that large numbers of workers went on sick pay, which, computed on the basis of the earnings of the month preceding the large-scale manufacture of the low-paying type of bodies, was higher than what could be earned by working. With the other type making up the majority of the products manufactured, the piece rates set were substantially less tight. At the same time—in connection again with the method of piece-rate setting applied for several years—the performance requirements changed for both skills and work groups. In the workers' unanimous opinion, the piece rates were much looser for assemblers and sheet-metal workers than for skilled component workers or machine operators. In addition to all this, in the "rush" period of the second half of the year (which the factory unit was forced into, among other things, by the backlog resulting from the fall in production in early 1967 and 1968), the enterprise was forced to handle the quality requirements "liberally". Consequently, one and the same piece rate was tighter in February than in September or October.

The job grades and personal wage rates were designed to express the differentiated requirements in the earnings of skills, work groups and individuals set to them by the divergent work tasks "in terms of quality". It was in fact the job grades and the personal wage rates that brought the qualitative differences between work tasks into the strictly quantity-oriented piece-rate wage scheme; hence their objectivity—from the point of view of ensuring the implementation of the performance principle—was just as important as the well-foundedness of piece rates.

In grading the work tasks, the enterprise took into account, in conformity with the provisions of the collective contract, the following view-

points:

- Skill requirement (the degree of professional qualification needed to perform the task).
- Physical requirement (muscular strength, sense organs, nerves, etc.).
- Responsibility (for the work process, for the factory equipment, for the workers' safety, etc.).

According to these viewpoints, the enterprise classified the work tasks into six grades (grades II, III, IV, V, VI and VII) and provided individual wage rates for each of them.[7]

In the factory unit discussed, all job grades from II to VI were represented. The sequence of the grades of work tasks truly reflected, in the workers' opinion, the gradation of the demand for work tasks. Most sheet-metal workers were employed in grade VI, assemblers and welders in grades V, IV and III; the majority of component workers and machine operators in grades III and II. The sheet-metal workers performed the most demanding work in the factory unit, requiring great "routine" and competence. The empty coach casings reinforced the continuous knocking of about sixty hammers in the levelling workshop, the so-called "concert hall", to such an extent that the noise approached the pain limit. Their sight, hearing, nerves, and joints were affected to an enormous extent. These were followed by the assemblers and welders, and finally the component workers and machine operators.

It appears from this that the job grades appropriately ensured that the quantity-centered piece-rate scheme, i.e. wages paid according to the quantity of products, turned out to be adequately differentiated; in conformity with the differences between the requirements of the individual work tasks.

The task of personal wage rates was a dual one. On the one hand, they had to ensure the differentiation of the job requirements within the work group, namely at the level of the individuals. On the other, they also had the important function of rewarding the individual's quantitative performance, ambition and diligence. The piece–rate scheme in the case of accounting by groups, directly rewarded the groups' work in terms of quantity, while it rewarded that of the individuals only indirectly. It was the personal wage rate scheme as the regulator of earnings proportions that was designed to reward individuals directly.

In the personal wage rate system the workers and the work tasks were graded according to two factors. One factor was the adequate fulfillment of the work task (in other words, the skill needed to perform the work within the regular working time and of the required quality). The other factor was the physical work requirements (i.e. working conditions). Hence the criteria related to the requirements of the individual's work and to their fulfillment almost completely coincided with the criteria of specifying the job grades in relation to the work tasks. The enterprise distinguished six grades according to the level of skill competence and four grades according to working conditions, i.e. to physical work requirements. Within these grades, sub-grades were foreseen for the appreciation of the workers' length of practice, i.e. a personal characteristic being partly independent of the work requirements. Each sub-grade, the smallest ranking unit, in contrast to the only wage rate of the job grade, expressed in forints, had a lower and an upper wage limit. These wage limits should make it possible to distinguish according to diligence, ambition, hence performance in terms of quantity, even among people of the same skill requirements, working under identical working conditions and with the same length of employment at the enterprise.

How were these criteria applied in practice?
The large majority of the workers of the factory unit (metal workers, assemblers, component workers,and welders) belonged, as regards their personal wage rates, to a rather low rank (according to skill competence in grades II and III: semi-skilled work, sophisticated semiskilled work or simple skilled work; according to working conditions in grade II: normal physical effort, unfavorable working conditions).

The skill competence of the workers within the groups was very homogeneous: they had to work in series production, the routinized work that they could learn in a short training. Among approximately sixty sheet-metal workers there were just a few who did more demanding work than the others. Hence, as regards skill competence, there could hardly be any substantial differences in the personal wage rates within the group.

Nevertheless, there were some differences. They appeared not in the skill requirements of the work but in the workers' formally evidenced qualifications. This contradicted the principle laid down in the collective contract: "a worker's skill competence should be classified according to the job he actually carries out, or according to the work regularly occurring in it." With regard to the working conditions and physical requirements the groups were also very homogeneous so that in setting the

personal wage rates within the group this factor did not play any role. The length of practice, the third criterion according to which personal wage rates were differentiated, exceeded even skill competence in importance. This measure of rewarding skill, which only occasionally manifests itself in individual performance and mainly as a function of the length of practice,is, even if not necessarily objectionable, still extremely debatable. Some sheet-metal workers, for example, characterized their work as follows: "Professional knowledge is of no significance here. Only skill, instinct and practice are wanted. People say, there is one rule for leveling sheets: to beat in the bumps and to beat out the dents. But it is not as simple as it seems. One must know where to apply heat to the metal. Every sheet is different. There are some people who learn it in two or three years, but others will never learn it, even after some twenty years." So, what is the effect of skilled workers' certificates and their long time of practice in this kind of work? No doubt, substantially more money but only very occasionally higher performance.

Disproportions

Disproportions violating the distribution by results between the factory unit discussed and other factory units had become common in the years preceding our research. Similar distortions could also be experienced between the workers of the factory unit and the higher hierarchical level, the management.

Similarly, disproportions affected both the performance requirements and the wages, hence the "input" and the "economic utility" sides alike. The enterprise management (in whose policy the dominant role was played by questions of distribution and whose picture of performance requirements was very vague and unreliable) interpreted them simply as earnings disproportions.

The disproportions experienced among the manual workforce of the individual factory units are put into sharp light by comparing the piece-rate plant discussed here with the units based on a time-rate system (with more or less fixed earnings). In the latter case it was the personal wage rates that constituted the real basis of the workers' earnings in contrast to the piece-rate areas, where their function was merely regulating the distribution of the group's wage base. In the time-rate factory units the level of earnings rose at an even and slow pace determined by the enterprise. In the piece-rate factory units, however, the level of earnings regularly exceeded the planned level. For 1969, the company

envisaged an hourly wage rate of 10.20 forints for the factory unit discussed, whereas the actual hourly earnings exceeded 12 forints. The disproportions in performance requirements and wage (or, in the view of the staff department, wage disproportions) stemmed from two factors: the state of the piece rates and the structure of job grading.

In 1968, the average performance in the investigated work groups of the factory unit discussed was 124.3 percent. This, as the staff department emphasized, proved that the piece rates were loose:

> The factory unit could not "sweeten" the workers of other factory units. Anyway, the people working in the unit and performing, as a rule, primitive, semiskilled work, could not be taken to be on equal footing with the highly skilled workers with twenty years of practice, such as precision borers or precision lathe turners, i.e. with those time-rate workers who were deprived (owing to the fixed size of average wages) of their wage increases by those men.

Thus the piece rates were tightened, at least partly, in order to maintain the appropriate wage proportions with the time-rate areas.

To this policy, however, two serious objections can be made from the viewpoint of the workers of the factory unit discussed. On the one hand, the question arises: What were the performance requirements of the time-rate areas preceding and following the standard setting of the piece-rate areas like?

While a definite answer is hard to obtain, one thing is beyond doubt: these requirements were originally milder, and the enterprise could not affect any change in their level. Fitters who asked to be transferred from the factory units discussed to other time-rate plants declared that "the hustle was by far not so great there as in their earlier workplace". "Foremen put no pressure on workers, but let them work calmly, quietly", although the manufacture of railway coaches, where people worked at a piece rate, offered no possibility for "mincing" and "fumbling" if one wanted to make money. The workers of the factory unit justly complained that while in the time-rate areas the working pace was comfortable and people in the long run got the same wages for work of unchanged intensity, they themselves had to work more and more and with increasing intensity for the same money. On the other hand, the enterprise, emphasizing the immense difference in skill requirements between time-rate and piece-rate jobs by tightening the standards for piece-rate jobs,

got involved in a contradiction. By job ranking, the staff department itself handled "sheet-metal workers performing primitive work" in the same way as "precision lathe turners and precision borers".

The work tasks of the sheet-metal workers or the factory unit ranked in the very high and well-paying grade VI, with grade VII being the highest. According to the relevant paragraph of the collective contract this means "compound skilled work ... more sophisticated tasks to be performed on the basis of drawings, independently, without guidance ... requires great professional competence, good technical sense and 5 to 10 years of practice". By contrast, the sheet-metal work, although done under very difficult conditions, was really a "primitive" job in this sense. The extent to which the enterprise itself was aware of this is shown (in addition to the above statement) by its handling of personal wage rates. Sheet-metal workers were ranked in the grade of "lower than medium semiskilled work, intricate semi-skilled work or simple skilled work". But job ranking seriously affected the earnings, while personal wages did not affect them at all. Thus the enterprise itself determined that sheet-metal workers should be placed (unjustifiably, in its own judgment) at the same earnings level as time-rate workers doing much more demanding skilled work. Yet, the incentive system, which is designed to bring about and reinforce certain "conditional reflexes" and consequently lead to doing more work for more money, should hardly be devoid of consistency.

The same problems arose in the question of performance requirements and wage proportions between workers and managers of the factory unit. The earnings of the best-skilled workers, mainly of sheet-metal workers and construction fitters, exceeded the wages not only of the time-rate lathe turners and of other machine-tool cutters, but also those of their own foremen, often senior foremen and workshop managers. No doubt, this influenced the personnel department in its decisions on rate setting at least to the same extent as "wage disproportions between piece-rate and time-rate areas". Nor is it accidental that the lower management largely supported these measures. But the same objections can also be made from the angle of the workers. It is, on the one hand, justified to question what kind of work a foreman, or senior foreman, or a workshop or a department manager performed, how he worked, and how the efficiency of his work increased, while the simple operator, owing to the tightening of the rates, was working more and more for the same money. The managers of the lower level in the view of the workers "got their money for nothing". This was, as we shall see later, often really the

case. At the same time, the work intensity of other technical and clerical workers was also doubtful. The plant workers called the central office building "UN palace", and gave a massive expression of their views: "the number of velvet armchairs ought to be reduced", "the offices should be given a thorough airing", "the whole gang should be hurled into a sieve and only half of the lot should be kept; the rest should be thrown out", etc. On the other hand, the equalized level of the workers' and the managers' wages and salaries resulted not merely from standard tasks, but also from such factors adapted by the enterprise as the above-mentioned job grades and the relevant wage rates.

It goes far beyond our possibilities to pass judgment on how tight the performance requirements were at the individual plants of the enterprise. But we find it necessary to stress repeatedly that distribution by results does not so much justly settle earnings proportions as adequately combined proportions of the work achieved and of the wages earned. From this point of view, the distortions were increased rather than mitigated by the enterprise practice, which, by tightening the performance requirements of the piece-rate areas while leaving the corresponding requirements of all other areas unchanged, aimed at creating "just" wage proportions.

Hence, injustice occurred in the principle of distribution by results in the following respects:

1. Within the factory unit, in relation to the individual work groups (because of the mechanical and "arbitrary" method of rate setting and owing to the changing and unfounded nature of the performance requirement).

2. Within the vocations and work groups of the factory unit in relation to individuals (with the given state of the piece rates, owing to the rigid, unrealistic practice of setting personal wage rates).

3. In relation to the factory unit and the time-rate areas as well as to the higher hierarchical levels (owing to the upsetting of the equilibrium between the work standards of the factory unit based on piece rates and the performance requirements set for time-rate workers and managers, or owing to the unfoundedness of the incentive factors expressing qualitative differences between work tasks, job grades).

In all this an important role was played by the inequity of wages, that is, by the narrowness of the scale of possible wage differentials, which become apparent both at the level of the working population and also in the enterprise as a whole.

The Functioning of Non-economic Incentives

The central position occupied in our study by material-economic factors does not follow from a policy narrowed down to money-mindedness (as is also obvious from our system of workers' behavior), but is also required by the socioeconomic realities of today. Yet we are aware that the workers' behavior—their production activities and attitudes toward the enterprise—are influenced, even at the present level of socioeconomic development, not only by material motives. Workers are not exclusively "economic beings". Their demands on the workplace are not limited to the dimensions of "economic utility" and "input", to the dimensions of advantage and disadvantage, but they transgress this framework.[8] The satisfaction of workers' economic demands is "a question of vital importance" and therefore dominant to them.

It is on this fact that the undeniably prominent role of economic stimulation is based. At the same time, workers make claims of a noneconomic character both on the work process and the social environment, which may be satisfied by adequate formal conditions fulfilling the function of economic incentives. In assessing the latter it must not be left out of account that people's economic and noneconomic demands are inseparably intertwined, consequently, the economic and noneconomic incentives of the enterprise must be of a complementary character: the effective working of the one presupposes and requires the adequate functioning of the other. Thus, at the enterprise under discussion the deficiencies of noneconomic incentives undoubtedly played a role in the distortions of economic incentives, and at the same time the distortions of economic stimulation made impossible any noteworthy progress in the field of noneconomic incentives. This was compensated partly by the workers' increased economic orientation, partly by forms of expression outside and even opposed to the organizational structure. (See also Chapter 4 of our study.) In the following the major factors of noneconomic incentives shall be discussed.

Work itself—the perspective of skill development—may stimulate a contribution in its broad sense to the enterprise objectives. This includes such elements of work performance as the exploitation and utilization of

the worker's mental and physical abilities, the opportunity of acquiring new methods and techniques, providing a possibility of developing their own initiative, etc.

The skill development perspective was closely affected by such macro processes as the development of the production techniques and organization. With the spread of rationalization and mass production, mechanization created repetitive, "fragmented" work. Methods of industrial organization , by separating leading and executive functions, could directly intervene in the production process. As a result of the changes in the technical and organizational aspects of procduction, differences among workers became insignificant, jobs were workers independently planned and carried out the whole of tasks, and creativity and personality could manifest themselves in work.[9] In the worker's unity of activity "a break" took place.

Although the technology of production was still primitive in relation to its organization, the deterioration of the skill development perspective resulting from the changed industrial activity, though only transitory, did not leave the workers untouched. The fitters', and welders' work, which—in the workers' view—was monotonous, did not provide any possibility of acquiring new knowledge, nor unfolding and utilizing one's qualifications. They required only a few years of practice or even less, "nothing new can be learned here, all possible knacks have already been tried in that job". On the other hand, the workers' expectations concerning the character of their jobs and skill developments, especially in the age group of people below 30, were very intensive. The gap between expectations and the actual work situation is illustrated in Table 3.

Although we are faced predominantly with macro processes, it must be mentioned that the loss of the workers' skill development perspective was also supported by the occasional or continuous pressure exerted on the workers by enterprise circumstances. Several skilled workers who liked their jobs complained that they had to complete their tasks even at the expense of quality.

When the professional perspectives decline, the meaning of the job for the workers does not primarily depend on its professional requirements, but—as pointed out by Touraine—"on its social aspects, that is, on the different degree of the divergent forms of worker participation".[10] The workers' concern focuses on problems of a higher order than the work posts, on problems like participation in making decisions directly influ-

Table 3: Workers' View Relating to Professional Development

Work situation	Criteria of evaluation			
	Learning new things	Using one's own ideas	Doing interesting work	Making use of one's professional knowledge
1. Actual situation in one's job	1.40	1.70	1.58	1.95
2. Desired situation in one's job	2.50	2.39	2.90	2.74
Gap between 1 and 2	−1.10	−0.69	−1.32	−0.79

Note: We have evaluated the factors relating to the nature of the job and to the likelihood of being promoted to the post of a foreman (see Table 23). In their classification the workers used the scores 1, 2, and 3, with 3 being the highest and 1 the lowest. If, for example, a worker thought that seniority at the enterprise played a prominent role in appointing a worker to the post of foreman, he would assign score 3. If this role was considered less prominent, he would give score 2, and if seniority at the enterprise was not taken into consideration at all, the score would be 1. The figures in the table show the averages of the scores given by the workers of the factory unit.

encing the working conditions, promotion in the management structure, and so forth. The development of such aspects of work, with other conditions being ensured, in the same way as the perspective of professional development, may fulfill the role of non-material incentives.

If the enterprise ties promotion in the management apparatus to the performance of workers, this factor may act as a driving force comparable to money. In the judgment of workers, however, it was not the people's professional skills and seniority, nor their work performance, but their "social activity" (party membership, trade union functions, etc.) and personal contacts with the enterprise management that played a decisive role in becoming a group leader or a foreman. (These were the posts also accessible, in general, to manual workers even without higher schooling or any diploma.) This seems to be evidenced by the fact that the lower leadership consisted almost exclusively of party members or those who fulfilled party or trade union functions.

The great importance of the activity in formal social organizations and the relative neglect of the actual work performed greatly narrowed

the number of those eligible to the posts of group leaders and foremen and extremely weakened the power of promotion as an incentive force. *Moreover the members of the lower management belonged both materi*ally and morally to a rather neglected stratum, and thus the possibilities of promotion were not attractive enough to better skilled workers. The repressed demand for promotion (or the lack of professional perspective) of workers also found expression in the fact that almost all workers had, or wanted to have, their children continue education, and there were hardly any workers who wished their children to take up their own trade. For example, an assembly fitter said, "I always tell my son not to be a fitter, to choose another trade. Sooner or later one loses one's honor here. The fitter has to carry the material to his work-place and supply himself with work. If I were single, I would leave this job at once. It is only for a living that I am still working here." Or a sheet-metal worker said, "I would wring my son's neck if he wanted to work here. He should study."

The lack of perspective of professional development and promotion was also connected with the fact—and this was also one of the peculiarities here—that the manufacture of railway coaches, owing to its economic inefficiency, was an enterprise activity "doomed to death". The management of the factory unit wanted to reduce gradually the number of members of the lower leadership, of workers of the individual trades, and the volume of coaches produced. In 1969, at the time of our field work, this tendency greatly worried the workers (although a certain change in that tendency was to take place later). The sheet-metal workers for example, were much distressed by the idea that in a few years time, when they were no longer young, they would be assigned to workplaces where they would not be able to make use of the knowledge and routine they had acquired during the past ten to fifteen years and would have to learn practically a "new skill".[11]

The workers' identification with the enterprise goals was impeded by the inadequate functioning of internal democracy.

The key institution of industrial democracy should have been the production meeting. This included "direct workers' participation in the management of the enterprise or of the plant, in the most practical and economical solution of production tasks." In principle, in the production meeting the workers had a say on technical and organizational questions, on all problems of economic and "moral" incentives. But how did this take place in practice? This was described as follows:

> An account is given of the plan fulfillment in the past quarter, of arrears, of absenteeism of less than a day, of accidents. They tell us to perform better quality work, or else we cannot meet Western competition. Then they ask us to make our contributions to the discussion. People tell that appropriate electrodes are missing, the bench planks need repair, the windows are dirty, so that they can't see when working. The simpler questions are answered at once; those that are harder to solve—as, for example, window cleaning—are answered in writing. Then nothing happens for months. The management ought to solve such questions right at their utterance.

Besides the sterile discussion of simple organizational problems, the formal approval of tasks and the evaluation of work competition, problems pertinent to the real interests of the workers are hardly discussed. One worker stated, "The more delicate problems criticized by us—rate and wage questions—are not even included in the minutes of the production meeting and are also left out in the reports sent to higher authorities." Given the above state of affairs it is not surprising that 60 percent, hence the majority of the workers of the factory unit, find no sense what so ever in quarterly production meetings held in a hurry between two shifts. (We have gained similar experience with the functioning of production meetings also in the building industry.) And the workers were not passive at all: we found that about 90 percent of them would gladly have had their say, directly or indirectly, in the enterprise decisions on questions relating to their interests. It is also characteristic that more workers would have wished to intervene in wage decisions, directly affecting their living conditions (57 percent), than in the general organizational decisions concerning them only indirectly (35.7 percent).[12]

The problem of the socialist brigade movement is closely connected with the question of industrial democracy. It is the aim of the movement "to disclose and utilize the internal reserves of the enterprise with the help of the activity of masses and also to increase thereby the efficiency of the socialist economy." Its goal is the evolvement of socialist collectives that, having appropriate information, knowledge, and experience, can take part with initiative and responsibility in enterprise decision-making in developing industrial democracy. The socialist brigade movement in the factory unit, like the institutions of industrial democracy, ended

up in formalism or became the covering organization for the defense of particular interests.

The first step of formalism was the creation of the "socialist brigade" not out of the natural units of work organization but often out of several work groups, called brigades. Of the factory unit's three socialist brigades one was made up of the Engel, Honner and Lázár groups of internal assembly fitters. The Engel and Honner groups were collectives divided by chronic conflicts of interests (Chapter 6) . Cooperation for a common goal, whatever it was, was unrealistic in their case. The second socialist brigade was the very cohesive Cziffra sheet-metal workers' groups, which put up the most resolute resistance against the enterprise endeavors and waged the most successful struggle for the defense of its own interests. In the third socialist brigade, which was made up of machine operators, not even the slightest traces of cooperation could be experienced.

The formalism of socialist work competition also made itself felt in the fact that the "outward appearance", the "careful keeping" of the brigade's diary, was the almost exclusive criterion in the evaluation of the group's work. "Reward depends exclusively, on keeping the diary. If it is not kept by me, there is no reward", one of the foremen said. Hence, the socialist brigade movement did not constitute any incentive power, as the ideals established by it were devoid of realism. The foreman of the Trencsényi group assembling the front pieces judged the situation very realistically: "In our unit it is impossible to set up a socialist brigade. People live in many places, they would not be able to participate (common visits to theaters and cinemas, etc.) and they don't want to lie. A 'smarter' foreman would of course be able to form a socialist brigade with these people". The Trencsényi group was, by the way, the most coherent and professionally best collective of the factory unit. (We wish to note that in 1971 the Trencsényi group became a socialist brigade.)

It is important to discuss the most essential social aspects of the work situation, as otherwise the workers could be blamed for excessive "money-mindedness". What we want to point out is not that the workers of the factory unit restricted their demands to financial requirements, but that the increased intensity of their material demands, along with other effects of their socioeconomic environment, was elicited by the neglect of their nonmaterial needs. With professional and promotional perspectives practically exhausted, with the lack of actual participation in decision-making, particularly in decisions concerning wages and piece

rates, as well as with the enforced creation of collectives, the conflicts erupted with elementary force on the highly important wage issue. The workers' struggle waged for their material perspectives also included, in essence, their disillusionment with the nonfulfillment of their nonmaterial needs. In a worker's view, the situation was described as follows: "Workers expects forints rather then moral appreciation because so far they have not obtained either. The relationship between the boss and his subordinates is bad.[13] One should be less exposed to the mercy of others."

The Impact of Distortions of the Control Mechanism on Workers' Behavior

The "negative" patterns of workers' behavior experienced in the factory unit—thus the troubles connected with performance, labor turnover, etc.—were no doubt closely connected with the functioning of the control mechanism. People were directly touched primarily by the inadequacies of material incentives, by the very doubtful development of their economic perspectives. Their behavior was also influenced by the absolutely unsatisfactory application of noneconomic incentives: by the lack of professional and promotional perspectives, etc. The close connection between workers' behavior and the control mechanism is also illustrated by the fact that the fluctuation in the production output of the factory unit and the large-scale resignations of workers began exactly in 1967, immediately after the distortions of the distribution by results. (In this respect it is worth noting that the distortions of the control mechanism deteriorated in the preceding years parallel with the distortions of the decision mechanism. We shall discuss the latter in Chapter 8.)

In certain cases, the connection between workers' activity and the role of incentives is almost direct and palpable. In the spring of 1969, for example, large numbers of machine operators left the factory unit because the piece rates had been tightened to an extremely great extent and they were unable "to make their money". But it would be a mistake to perceive the relationship between workers' behavior and the functioning of the control mechanism, however tight it may be, as a direct and one-way relationship. Rather, it is an indirect and two-way interconnection that is realized through intricate transmission mechanisms.

Assuming a direct relationship, the researcher would expect a "negative" workers' behavior to make itself felt in the areas most afflicted by the inadequacies of the distribution by results. This, indeed, was

partly the case. From the point of view of the workers, the proportion between "input" and "economic utility" deteriorated in the factory unit as a whole owing to the tightening of the performance requirement. The economic (and noneconomic) perspectives of the workers were generally very limited. But the relationship was not that clear to them in all respects. In the case of the sheet-metal workers, for example, the earnings of the best skilled workers among them reached an average of 4,000 forints in 1968 and even 6,000 forints per month in peak periods.

They enjoyed a number of benefits and a whole system of privileges: their job grade was high (VI), they were the only ones in the factory unit that had a progressive wage scale, they obtained a significant number of task bonuses and overtime payment and so forth. Nevertheless, in 1968 it was the sheet-metal workers who caused the largest drop in the performance level jeopardizing the continuity of production as a whole. While the factory unit's output fluctuation was 37.8 percent, theirs was 76.7 percent. Moreover, sheet-metal workers represented the highest rate of resignations. Over a period of eighteen months 46 percent of them left the factory unit, while the rate of resignations among the assemblers, who enjoyed substantially fewer benefits, was "only" 34 percent.

All these circumstances obscure the clarity of the picture and make the workers' direct relationship with the control mechanism appear doubtful. Thus further explanation is needed as to the transmission mechanists between them.

If this relationship is only indirect, then we need not assume that in the economic incentive system the appropriate realization of distribution by results would terminate "negative" workers' behavior. On the contrary: if workers are able to exert a definite influence on production results, they are presumably also able to influence the wage distribution directly affecting them or all elements of the control mechanism in its broad sense (piece rates, personal hourly wages, etc.). Therefore, we consider it idealistic to believe that the deficiencies in the distribution by results could be eliminated by only a few measures (such as the abandonment or differentiation of the average-wage control, the internal reform of the enterprise incentive construction, the "development" of collectives, the "education" of people's consciousness, etc.). In this respect, the reaction of workers' behavior to the control mechanism, the existence of a peculiar workers' behavior making itself felt in the question of distribution, must not be neglected (see Chapter 8).

Hence, the next issue of analysis will be the interrelations between

the control mechanism, more exactly the economic incentive system, and workers' behavior.

Notes

1. In contemporary psychological research, mainly in the interpretation of the results of examinations carried out under industrial conditions, it has become commonly accepted that in motivating an activity we are always faced with a given set of motives (motive constellation). It is never the effect of single motives that is responsible for an action, even if one particular element of the motive set may be assigned a "prominent role." Ferenc Pataki, "Az elosztás és az ösztönzés néhány szociálpszichológiai kérdése" (Few sociopsychological questions of distribution and stimulation), *Társadalmi Szemle*, 1971. No. 3. p. 48.

2. Charles R. Walker and Robert H. Guest, *The Man on the Assembly Line* (Cambridge: Harvard University Press, 1952), p. 91.

3. S. Cazes and C. Durand, "La signification politique du mouvement de mai, analyse de tracts syndicaux et gauchistes", *Sociologie de Travail* (1970) No.3. (Numero spécial: *Le mouvement ouvrier en mai 68*).

4. S.E. Seashore, *Összetartó munkacsoportok a vállalatoknál* (Coherent work groups at enterprises); R.A. Sutermeister, *Ember és termelékenység* (Man and productivity) (Budapest: Közgazdasági és Jogi Könyvkiadó, 1966).

5. D.C. Pelz, "Influence: A key to Effective Leadership in the First-Line Supervisor", *Personnel*, November 1952.

6. On the conditions of successfully applying the performance wage system or group wage systems, see H.G. Hodges, *Management* (Boston: Houghton Mifflin, 1956) p. 497; H.B. Maynard, *Handbuch des Industrial Engineering* Teil: IV–VI. (Berlin: Beht, 1963); M. Bolle de Ball, *Les salaires aux résultats: Theorie et Pratique* (Bruxelles: Univ. Libre de Bruxelles, 1970), pp. 28–79.

7. The difference between wage rates related to standard hour was 0.90 forint. The wage rate of job grade VII was 11.16 forints.

8. L. Kaprik, "Attentes et satisfaction au travail", *Sociologie du Travail*, 1966. No.4, pp. 389–416.

9. A. Touraine, *Consentement ou refus. Les travailleurs et les changements techniques* (OCDE, 1965), pp. 26–27.

10. A. Touraine, *L'évolution du travail ouvrier aux usines Renault Paris* (C.N.R.S., 1955), p. 177.

11. Studying the professional attitudes of French miners toward changes we can experience similar phenomena. G. Barbichon and S. Moscovici, *Modernisation des mines, conversion des mineurs* (Paris: Ministere du Travail, 1962), p. 201.

12. Similarly, instructive from this point of view is the research by Polish sociologists on the "institution of workers' control in the field of engineering". The institution of workers' control, according to 7.5 percent of the workers is concerned with the problems of the working population, more than two-fifths of them do not even know whose interests they are representing. For more detail see W. Weselowski, "Les opinions des ouvriers polonais sur leur travail et sur leur enterprises", *Sociologie du Travail*, 1966, pp. 41–43. (Numéro spécial: *La sociologie industrielle en Pologne*).

13. We wish to note that the foreman can play a very important role in satisfying, on behalf of the enterprise, the nonmaterial needs of workers. For more details on this question see L. Héthy and Cs. Makó "Válságban a művezetői funkció?" (Is the Foreman's Function in a Crisis?), *Pártélet*, 1970, p. 1.

3 Workers' Behavior in Relation to Performance: Performance Tactics

To provide a clear presentation of the effects of the distortions of the control mechanism on workers' behavior, its manifestations, it is expedient to set out from the most palpable form of workers' behavior connected with production, and with performance.

The performance problem in the factory unit emerged in 1967. At that time incalculable, unreliable changes in the performance percentage (and simultaneously in hourly earnings) began. The maximum oscillation of the performance index (and of the wage index) in 1967 was a multiple of the oscillations experienced in previous years. The tendency went on in 1968 and showed a slight mitigation only in 1969 (see Table 4).

Antecedents of the Performance Problem

The problem relating to the production results of the factory unit made itself felt in 1967–68. The preceding three years (1964–66) constituted a rather critical and difficult period to the people working there, presumably due to the changes carried out at the enterprise and supposedly also to the certain macro-economic processes. As regards changes within the enterprise, the merger of the manufacture of railway coaches with the production of machine tools took place at that time, and certain plants within the railway coach section, including the plant discussed here, became "independent" units at that time.

From 1964 to 1966 a deterioration of the workers' economic position took place. The workers' income fell in absolute terms over these three years. Hourly earnings declined from 9.62 forints in 1964 to 9.24 forints in 1965. The fall in hourly wages was not connected with the piece-rate base income, as the performance level over the three years roughly equalled that of the previous years and wage rates within the job categories were unchanged. The fall in hourly wages was rather due to a decline in the quantity of rewards paid from the managerial fund.

A still more sensitive loss, however, was caused by the fall in overtime, which was not apparent in hourly wages. In 1969 the workers of the factory units still worked on average 33 hours overtime per month. This number fell to about 12 in 1964 and to some 20 in 1965–66. The significance of this change can be illustrated by a brief computation: A

man works 200 hours in regular working time, and, assuming a 100 percent group performance, earns 2,000 forints from an hourly wage rate of 10 forints. If he works, besides his regular working time, 33 hours overtime, this means, including weekday and holiday surplus earnings, about 500 forints extra income, which corresponds to the forint value of a 25 percent surplus performance. (The enterprise paid overtime on the basis of hourly wages reached in normal working time.)

Table 4: Changes in Several Indicators of Monthly Performance and Hourly Wages in the Factory Unit Investigated

Year	Monthly performance			Hourly earnings per month		
	Average	Standard deviation	Max.-min. gap	Average	Standard deviation	Max.-min. gap
	percentage			forints		
1962	100.70	1.65	5.5	9.41	0.22	0.73
1963	101.53	4.59	14.8	9.57	0.45	1.47
1964	102.94	4.10	16.2	9.62	0.44	1.70
1965	100.08	2.88	13.0	9.24	0.35	1.57
1966	102.41	3.70	12.6	9.61	1.05	1.10
1967	106.27	9.02	(!) 35.3	9.73	0.56	(!) 3.13
1968	119.24	10.53	(!) 37.8	11.10	1.24	(!) 4.35
1969	114.58	9.31	(!) 35.3	11.73	0.72	(!) 3.66

The economic situation of the workers showed—although it is disputable to what extent—a certain relative deterioration over the three years. In 1964 a 10.4 percent, in 1965 a 9.4 percent, and in 1966 a 6.9 percent rate revision, hardly justifiable by technological and organizational changes, was carried out. While the enterprise tightened the performance requirements for the old-type coaches, the introduction in 1964, 1965 and 1966 of new types, whose manufacturing needed more time and efforts, meant a further burden for the workers even if their burdens were largely borne by the enterprise.

While the hourly wages at the enterprise as a whole rose evenly (from 8.23 forints in 1964 to 8.37 forints in 1965 and to 8.57 forints in 1966), of course the salaries of the technical and clerical staff increased, too, with the performance requirements remaining unchanged.

Considering the deterioration of the workers' economic position in

1964–66, they could of course not be expected to react. They adhered, after all, to the principle that "the money that the kitchen needs must be secured by hook or crook". Since in that period, owing to the much stricter rules of changing one's workplace and to the much more limited job opportunities, leaving the factory was an unfavorable alternative, a reaction within the factory was to be expected.

Is Performance Fluctuation an Organizational Symptom or an Intended Workers' Action?

What do the rhapsodical performance fluctuations of 1967–68, the abrupt fall or the steep upswing of the production indicators testify? To what extent are they explained by the organizational and incentive measures of the enterprise? To what extent can they be regarded as the workers' organized action taken to improve their economic position after the three "lean" years and to enforce their wage demands?

It is hard to give unambiguous and direct answers to these complex questions.

In analyzing the factory data it appears that the fluctuations in production results can unambiguously be ascribed to the organizational and incentive measures of the enterprise; they have nothing to do with the workers' intended, let alone organized or collective activity. This is also supported by the very close correlation among the monthly performance indicators, the type of coach manufactured, the quantity of monthly overtime and target bonuses.

As has often been pointed out, in the factory unit two types of coaches were produced in 1967–68: a "low-paying" type (characterized by tight piece rates) and a "well-paying" one (with looser work standards). The former was introduced in the course of the three rate cuts between 1964 and 1966, when the relevant performance requirements became tight. The latter was a new type whose piece rates had not yet been tightened by that time. This meant that the workers, independently of their intentions, could reach only low performance percentages (and hourly wages) on the one type and relatively high ones on the other. Table 5 clearly shows that the manufacture of the two types, owing to the varying piece rate standards, differed greatly by 1967 and that the enterprise ordered their production more and more rhapsodically (which is revealed by the comparison of the production and deviation ratios).

Between 1967 and 1969, in the months when the production of the "low-paying" type was above average, the output of the factory unit was

Table 5: Major Indicators of the Performance Requirement

Year	Monthly production proportion of the "low-paying" type		Performance in the months when the production proportion of the "low-paying" type is		Difference
	average	standard deviation	lower	higher	
			than the annual average		
	percentages				
1962	56.00	44.16	100.62	101.22	−0.60
1963	59.75	25.43	101.50	101.56	−0.06
1964	64.83	31.25	99.00	104.93	−5.93
1965	46.33	28.28	98.26	101.39	−3.13
1966	35.85	27.02	102.75	102.07	+0.68
1967	35.75	28.97	112.18	100.35	+11.83
1968	29.33	27.01	121.65	114.43	+7.22
1969	27.17	25.63	117.92	111.23	+6.69

by 7 to 12 percent below that of the other months. A similar relationship could also be experienced with the quantity of overtime, target bonuses and production results. From 1967 on, the performance percentages in the months with above-average overtime and target bonuses significantly exceeded those of the other periods (see Tables 6 and 7).

The illustrated relationships, according to Tayloristic assumptions concerning people's behavior, are completely sufficient to explain the emergence of performance problems. Logical (and largely correct) is the assumption that the enterprise at the beginning of the year tried to produce the coach type with tight piece rates, and when there was a slowdown in production and the factory unit experienced an overall drop, the management ensured a bigger production share of the "well-paying" type of coaches and allowed large quantities of overtime so as to make sure that the production plans were fulfilled. As conceived by the enterprise within the limits of their physical capabilities, the workers should achieve the maximum performance in producing both the "good" and the "bad" coaches, but as a result of the more radical incentives (overtime, target bonus), they should attain better than average results.

But this was not really the case. The organizational and incentive measures of the enterprises did not simply fulfill the role of the cause,

Table 6: Changes in Monthly Overtime and Performance

Year	Monthly quantity of overtime		Performance percentage in the months when, in relation to the average		Difference
	Average	Standard deviation	more	less	
			overtime		
	hours		was allowed (percentages)		
1962	2.770	4.610	102.40	100.36	+2.04
1963	8.250	6.010	103.29	99.08	+4.21
1964	2.919	2.630	104.10	102.11	+1.99
1965	5.521	3.540	101.36	99.17	+2.19
1966	5.485	2.796	101.95	102.87	−0.92
1967	6.381	3.277	111.75	100.78	+10.97
1968	6.853	3.266	124.00	114.48	+9.52
1969	2.289	1.326	115.24	113.64	+1.60

Table 7: Changes in Monthly Target Bonuses and Performance

Year	Sum of monthly target bonuses (forints)	Performance percentage		Difference
		in months with	in months without	
		target bonuses		
1962	5.934	100.93	100.62	+0.31
1963	1.120	99.25	101.99	−2.74
1964	0.833	95.50	104.35	−8.45
1965	5.241	101.53	99.60	+1.93
1966	13.661	104.03	101.60	+2.43
1967	17.151	110.83	101.70	+9.13
1968	13.608	127.20	111.28	+15.92
1969	2.083	121.75	113.14	+8.61

Note: Exact data on the quantity of rewards fulfilling a role similar to that of the target bonuses and paid from managerial funds were not available to us.

nor did the production results and the workers' behavior fulfill simply the function of the effect. To prove our statement, we shall survey the events of the period after January 1968 (which we have already done in relation to sheet-metal workers in Chapter 1 of our study), examining

the changes in interconnections among the coach type manufactured, the quantity of overtime, the target bonuses and performance (see Table 8).

In January and February, the enterprise imposed wage restrictions. It increased significantly the production of the "low-paying" type, reduced overtime and did not provide incentive bonuses. As a result, the workers' regular hourly wages, and even more so their overall earnings including overtime, declined. In April, the enterprise again increased the production of the "well-paying" type, by which the workers again managed to reach a high performance percentage. Despite these measures, the output did not rise, but rather fell. A steep rise began only in May and June, when the enterprise nearly tripled overtime and set considerable incentive bonuses.

This, in our view, demonstrates that the enterprise can by no means be regarded unambiguously as the active, initiating party, nor the workers as the passive, reacting one. Although the relationship among overtime, incentive bonuses and performance percentage (output) is close, it does not simply exist in such a way that the increasing quantity of overtime and incentive bonuses result in a growing output index. What really happens is that the output index is low in the absence of a large amount of overtime and incentive bonuses. This interpretation of the phenomenon provides the first step toward putting the whole problem into a new light.

The "Overtime Game" and the "Target Bonus Game"

The "overtime game" and the "target bonus game" that began in 1967 were an unequivocally organized workers' tactics that[1] brought about an essential change in the content of both incentive factors.

The original function of overtime was to make it possible for workers to reach the production targets set by the enterprise within the extended working time legally regulated by collective bargaining if they were unable to do so within the normal working hours. As a matter of fact, overtime provided a double contribution to ensuring the desired production results. It extended, on the one hand, the working time and, on the other, stimulated through its peculiar wage construction the workers' efforts made in the regular working time (hence, overtime was paid on the basis of the performance percentage or of the hourly wages reached in the normal working hours; the higher that percentage, the more money could be made by overtime). Up to 1966, the function of overtime was

Table 8: The Proportions of Input and Distribution for Case of Skilled Sheet-metal Workers

Year, month	Performance (percentage)	Hourly earnings (forints)	Share of the "low-paying" type in production (%)	Overtime (hours)	Incentive bonus (forints)
1968.01	106.1	9.84	20	11.529	-
02	104.8	9.63	80	4.681	-
03	105.9	9.61	81	5.766	-
04	101.3	(!) 9.13	(!) 28	(!) 4.759	-
05	121.4	(!) 11.36	(!) 1	(!) 11.211	(!) 27.500
06	126.9	(!) 12.18	(!) 0	(!) 12.165	(!) 50.800
07	124.5	11.52	13	7.364	-
08	126.0	11.77	27	7.750	-
09	139.1	13.48	3	7.531	50.000
10	125.3	12.00	37	4.724	35.000
11	121.7	10.98	50	3.547	-
12	127.9	11.73	12	1.229	-
Average:	119.2	11.10	29	1.229	13.608
1969.01	111.3	11.16	6	0.200	-
02	117.6	11.71	5	-	-
03	110.8	11.19	4	1.513	-

as it was meant to be: to promote a well-balanced output within the normal working hours (see Table 6) and ensure that the workers were able to cope with their tasks even under the pressure of extraordinary burdens. In 1967–68, however, as clearly shown by our data, the role of overtime reversed or rather it was reversed by the workers: they were ready to make serious efforts even in the regular working time if the enterprise "rewarded" them with overtime. "If there was money (and overtime meant much money), they worked seriously, otherwise they worked mostly on and off." Similar, though less intricate, was the target bonus game.[2]

The workers could have earned more money even without enforcement. The less tiring way would have been to make increased efforts in the regular working time, thereby to raise the performance percentage and base incomes. But the latter appeared to be a much more dangerous way. The events of 1964–66 taught the workers that even a moderate rise

in performance may lead to a tightening of the piece rates, thus worsening for them the proportion between "labor input" and "economic utility'. The enforcement of overtime and target benefits did not involve that much risk.

Nevertheless, emphasizing overtime and the target bonus, as became apparent from the events of 1968, was not devoid of risks.

Even if overtime did not stimulate increased output directly, it did so indirectly as the enterprise paid overtime according to the performance percentage or to the base income attained in the regular working time. The target bonus acted in the same direct way, as it was tied directly to the attainment of certain production targets. Hence, by beginning to "play", from 1967 onward, on overtime and target bonuses instead of raising performance, the workers created a double-edged process.

The Differentiation of the Patterns of Workers' Behavior

In 1967–68, arbitrary workers' action, performance and wage tactics began to make themselves felt in the factory unit as a whole. But this did not create an all-embracing movement in which all groups of workers and their members jointly participated.

In the patterns of behavior significant differences manifested themselves. There were work groups that resorted to tactics. They constituted the majority, but others did not follow. Among those using tactics were certain groups that acted according to a very definite concept, while the activities of others were guided by much less decisive and uncertain directives. Moreover, the application of tactics or its lack did not result in identical consequences for the groups and individuals: some attained major economic benefits and had to bear hardly any "burdens", while others had only small advantages and major burdens. (In our further analysis we shall be concerned primarily with the individual trades as the enterprise management also thought in terms of vocational groups when formulating its incentive policy, the regulation of hourly wages, overtime, the setting of piece rates, etc.)

The performance levels and hourly earnings of 1968 are shown in Table 9. The data clearly reveal that the unpredictable fluctuations of performance percentages and hourly wages that began in 1967 were due, in the first place, to the activities of the sheet-metal workers. The maximum oscillation of their performance percentage of the 1964–66 period (25.5 percent) doubled in 1967 (57.7 percent) and tripled in 1968

(76.7 percent). The fluctuation was much less in the case of assemblers and component fitters, as well as other vocations (electric welders, etc.).

Table 9: Changes in Performance and Hourly Earnings of Skilled Sheet-metal Fitters (1968)

	Monthly performance			Hourly earnings per month		
	Average	Standard deviation	Max.-min. gap	Average	Standard deviation	Max.-min. gap
	Percent					
Sheet-metal workers	116.9	19.7	+76.7	12.11	1.80	+7.20
Assemblers	118.1	11.7	+35.3	11.22	1.19	+3.53
Component fitters	134.5	12.8	+51.7	11.94	1.07	+4.01
Factory unit	119.2	10.5	+37.8	11.10	1.24	+4.35

If we regard the index of maximum oscillation (the percentage gap between maximum and minimum monthly performance) as shown in Table 9 in comparison with the average monthly performance level attained by the individual vocations, then the constant oscillation of the sheet-metal workers' production efforts appears even more conspicuous. Given their relatively low average performance level (116.9 percent), an oscillation of that extent (76.7 percent) might involve a decline in the performance level, jeopardizing the continuity of production in the factory unit. By contrast, given the high output (134.5 percent) of the component fitters, the related maximum oscillation (51.7 percent), just as in the case of the assemblers, may be regarded as a normal value.

To what extent did the "overtime game" and the "target bonus game" prove to be effective in the individual vocational groups?

From the 1968 data (see Table 10) the conclusion may be drawn that both the "overtime game" and the "target bonus game" proved beneficial to the sheet-metal workers, with the case being much the same with the assemblers. Both groups tied the level of their efforts made in the regular working time in one way or another to the extent to which the enterprise was willing to "dive into its pocket" and pay in the form of overtime or target bonuses.

Component fitters displayed a radically different form of behavior. With them, both incentive factors preserved their original contents. In fact, their performance percentages were higher in the months with less than average overtime than they were in the months ensuring them much surplus work. The target bonus did not play any prominent role.

Table 10: The "Overtime Game" and the "Target Bonus Game" in the Individual Vocational Groups (1968)

Vocation	Performance percentages					
	in months with			in months in which target bonuses		
	more than average overtime	less than average overtime	difference	were given	were not given	difference
	percentage					
Sheet-metal workers	127.5	106.3	+21.2	132.9	100.9	+32.0
Assemblers	122.2	114.0	+8.2	126.1	110.1	+16.0
Component fitters	132.4	135.8	−3.4	139.0	134.0	+5.0
Factory unit	124.0	114.5	+9.5	127.2	111.3	+15.9

The Behavior of Sheet-metal Workers

In a case description illustrating the patterns of workers' behavior from an "outsider's" point of view we have already given an account of the activities of the sheet-metal workers at the beginning of this text. The same events, with the flat facts and relationships looked at from the researcher's angle, present a still more clearly outlined picture (see Table 11).

In February and March 1968, the enterprise management restricted the earnings, i.e. prescribed a very large percentage of the "low- paying" coach type to be produced (80 to 81 percent). As a result, the sheet-metal workers' hourly wages fell by about two forints by March, below the average of the last quarter of the previous year. At the same time, the enterprise reduced by half the quantity of overtime until March.

Deeply hurt in their interests, after a short time of tolerance the workers started a counteraction. In April, after the enterprise had already decided to have the "well-paying" type produced, but invariably refused to set target bonuses and allow more overtime, the workers enforced a decreased output (including a fall in their own hourly wages!) to the very low mark of 77.2 percent (8.20 forints). And they did so arbitrarily and deliberately. Moreover, many of them went on sick pay or left the unit, which further increased the troubles. The production of the factory unit and, in the longer run, the manufacture of railway coaches, were in danger of being stopped.

In May and June, the enterprise was compelled to set large-scale target bonuses and to slightly raise the overtime fund. In response to this, the workers raised the performance level of 77.2 percent in April to 132.7 percent in May–June. As the enterprise management set more and more target bonuses and allowed overtime to a growing extent, the performance level rose accordingly. By August, the quantity of overtime had doubled. In September, the performance percentage was already 153.9 and the hourly wage rate attained in the regular working time was 15.40 forints!

In these months the overtime of certain sheet-metal workers reached 80 to 100 hours, and monthly earnings of 5,000 to 6,000 forints were not uncommon.

In October and November, parallel with the termination of the period of target bonuses and with the repeated reduction of the permitted overtime, the output of the sheet-metal workers began to fall again. Their production performance (107.2 percent) in October–November was low enough to avoid any piece-rate resetting in January 1969, which was carried out in all those skills where the output index exceeded 108 percent in these two months. Similarly, the sheet-metal workers also avoided any piece-rate revision in April 1969, as their output had reached only 95.4 percent in January–February. The latter output indices are especially noteworthy, as the share of the "well-paying" coach types produced in large batches was much more favorable than, for example, in July and August 1968, when top production results were recorded.

The Behavior of Assemblers

The situation of the assemblers developed as shown in Table 12.

The wage-restriction measures taken by the enterprise management in February–March 1968 had a severe effect on the assemblers, just as

Table 11: Changes in the Proportion of Input and Distribution for Skilled Sheet-metal Workers

Year, month	Performance (percentage)	Hourly earnings (forints)	The share of the "low-paying" type in production (percentage)	Per capita overtime (hour)
1968.01	109.4	10.92	20	62.3
02	103.5	11.23	80	38.8
03	104.9	10.98	81	32.0
04	77.2	8.20	28	33.0
05	131.6	**12.22**	1	37.4
06	133.8	**13.15**	–	31.9
07	135.0	**13.41**	13	36.8
08	131.5	**11.14**	27	58.0
09	153.9	**15.40**	3	44.2
10	111.8	**14.09**	37	30.6
11	102.7	13.25	50	19.0
12	107.5	11.53	12	9.0
Average:	116.9	12.11	29	36.1
1969.01	95.9		6	–
02	94.7		5	–
03	89.7		42	20.6

Note: For the data typed in bold, the enterprise management provided significant target bonuses—from May to October—increasing the hourly earnings of sheet-metal workers by a monthly average of about 144 forints.

they did on the sheet-metal workers. The level of their hourly earnings and especially of their overtime incomes declined significantly. In April, when the enterprise already increased the share of the "well-paying" coaches, the assemblers, like the sheet-metal workers, reached a low output. Although they demonstratively did not diminish their performance, in April they "cautiously" kept the low level of the previous months. A change took place only when the enterprise appreciably increased the number of overtime hours and set target bonuses in May and June. This caused the output index to rise from 104.1 percent in April to 122.8 percent for May and June.

The output level of the assemblers remained high—in contrast to that of the sheet-metal workers—even after the target bonuses had come to an end and overtime had been reduced. The assemblers were not influ-

enced by the danger of imminent piece-rate cuts. In October–November 1968 they reached 122.6 percent and in January—February 1969 119.9 percent. The two piece-rate cuts of January (14.6 percent) and April (11.9 percent) caused significant losses to them.

The Behavior of Component Fitters

The activity of the component-fitters differed from the behavior of both the sheet-metal workers and the assemblers. (see Table 13)

Summary of the Characteristics of Performance-related Behavior According to Vocational Groups

Summing up the characteristics of the performance and wage-related workers' behavior, the following statements may be made:

1. The sheet-metal workers acted according to a very definite conception. It was they who succeeded in "squeezing out" of the enterprise maximum overtime and target bonuses without having to pay a too high price by having their piece rates reset. When there was much overtime, their performance was high. When they sensed the danger of price-rate cuts, they reduced their output to below the critical level. In their tactics there was complete harmony between aggressive features (reduction of performance to enforce overtime and target bonuses) and protective ones (reduction of output to avoid the resetting of piece rates). Due to their tactics by 1968 the sheet-metal workers became the best paid workers of the factory unit. Their hourly wage rates were the highest in the factory unit (12.11 forints) and they received the largest quantity of overtime (36.1 hours a month per capita). In addition, they also avoided being involved in the tightening of performance requirements.

   This did not mean, of course, that the sheet-metal workers succeeded in avoiding any piece-rate cutting measures taken in 1969. The enterprise, quite unjustifiably, encroached upon one of the workers' privileges, progression, which they had enforced by their output reduction in 1967. Progression meant that after serving a certain number of standard hours and reaching a certain performance percentage, the workers were entitled to a rising amount of money for surplus working hours and surplus output percentage. Progression originally began at 70 percent, which in January

Table 12: Changes in the Proportion of Input and Distribution for Assemblers

Year, month	Performance (percentage)	Hourly earnings (forints)	Per capita overtime (hour)
1968.01	102.3	10.07	32.2
02	101.3	9.69	5.2
03	103.4	9.65	10.0
04	104.1	9.75	6.1
05	118.5	**11.15**	46.8
06	127.2	**12.12**	44.4
07	125.0	**12.00**	28.0
08	123.3	**11.86**	25.1
09	136.6	**13.18**	24.7
10	125.8	**12.01**	12.9
11	119.5	10.91	3.4
12	130.1	12.27	1.9
Average:	118.1	11.22	20.1
1969.01	114.0	–	–
02	124.9	–	–
03	118.2	–	1.0

Note: In the months, whose data are typed in bold—from May to October—the sum of the target bonuses paid by the enterprise management increased the assemblers' hourly earnings by a monthly average of 0.28 forints.

1969—simultaneously with the first piece rate revision—was increased to 80 percent. As a result sheet-metal workers, who in 1967–68 at a 100 percent performance level were rewarded for 115 percent, as of January 1969 were rewarded only for 110 percent.

2. The assemblers' tactics was more indefinite, more indistinct. Its "aggressive" elements were milder: in April 1968, the workers applied only "cautious" restriction of output to remind the enterprise that they wanted more overtime and target bonuses. At the same time, the appropriate "defensive" elements were missing in their tactics, which is why they incurred losses. Consequently, the assemblers' tactics was less fruitful than that of the sheet-metal workers, primarily because their target bonuses were lower, their

Table 13: Changes in the Proportion of Input and Distribution for Component Fitters

Year, month	Performance (percentage)	Hourly earnings (forints)	Per capita overtime (hour)
1968.01	131.9	11.48	21.0
02	124.0	11.12	14.0
03	112.3	10.32	28.3
04	123.0	10.99	21.4
05	125.5	11.10	12.5
06	131.3	11.55	16.4
07	132.4	11.54	9.8
08	140.9	12.30	10.7
09	147.6	13.25	3.9
10	139.0	**12.87**	2.5
11	164.0	14.33	21.0
12	141.5	12.32	8.3
Average:	134.5	11.94	14.2
1969.01	135.7	–	–
02	126.9	–	–
03	140.3	–	–

Note: The enterprise paid target bonuses to component fitters only in October (typed in bold), increasing their hourly earnings by 0.34 forints.

hourly earnings amounted to only 11.22 forints (while sheet-metal workers earned 12.11 forints) and their monthly per capita overtime was only 20.1 hours (compared to 36.1 hours for sheet-metal workers).

They were not awarded any special privileges similar to those of the sheet-metal workers.

3. In the case of the component fitters, no tactics worth mentioning existed. They were unable to obtain any target bonuses or any significant quantity of overtime by resorting to tricks. Hence, they tried to find compensation for these losses by way of increasing their percentage performance. This was due to the fact that, although they received a minimum amount of target bonuses, their hourly wages were relatively high (11.94 forints), while the num-

ber of their overtime hours remained very low (14.2 monthly hours per capita). It was also-due to this that the enterprise could carry out its most radical piece-rate revision exactly with the component fitters.

Thus, most workers of the factory unit applied some tactics. This is evidenced by the close correlation between the performance percentage of the sheet-metal workers and of the factory unit: its index computed for 8 years (1962–1969) is 0.78. (Computed for the individual years: 0.65 for 1962, 0.86 for 1963, 0.94 for 1964, 0.88 for 1965, 0.73 for 1966, 0.78 for 1967, 0.79 for 1968, and 0.87 for 1969.) Since the sheet-metal workers on average made up only about one-fifth of the factory unit personnel, it appears to be justified to assume, on the basis of the correlation indices, that there existed a kind of correspondence between their activity and that of other vocational groups, such as the component fitters, with which this harmony did not exist.

The workers' tactics produced the following results: after the "three lean years" a veritable "prosperity" ensued in the position of the factory units' workers. Their hourly earnings rose steeply in 1967–68. The decline or stagnation in 1964–66 (9.62, 9.24, 9.61 forints) was followed by an appreciable upswing. The hourly wage rates were 9,73 forints in 1967 and 10.10 forints in 1968.

Moreover, the number of overtime hours also increased. But the workers' position was undoubtedly negatively affected by the two piece-rate cuts of 1969 when the performance percentages of the factory unit reached in October–November 1968 and in January–February 1969 were reset, causing a loss of about 20 percent in wages (more exactly, in the wage level of the corresponding "labor input").

The figures themselves already disclose much about the motives of performance tactics as a type of "negative" workers' behavior. It is, however, evident that they are not sufficiently conclusive, giving no information whatsoever about how these tactics were implemented nor about their broader socioeconomic motives.

Notes

1. We should like to note specifically that in connection with the performance oscillation, as obvious from the above facts, not only the patterns of workers' behavior may appear to be a determining factor, but also the enterprise's production policy and program

that it formulates, taking into account several other circumstances (e.g. delivery deadlines, the reservation of production capacity for the end of the year, etc.).

2. Performance regulation is not exclusively due to the contradictory incentive policy applied by the enterprise in the recent past.

   Workers were taught its tricks by circumstances that are widely known in Hungarian engineering plants. Group payments, i.e. the distribution of the group's wage fund according to personal hourly wages, involves in itself the regulation of individual performance because nobody in the group wants to work "for others' benefit" and nobody tolerates that "others should have work done for themselves". The regulation of the group performance level is separated by just one step from the regulation of individual performance corresponding to the hierarchy of personal hourly wages.

   The organizational deficiencies of enterprises—the frequent stoppages in labor and material supply—also give rise to the emergence of this step. If the work to be done is too little—sufficient only for three to four hours—then work groups "divide" it into eight hours among themselves. People do not like to loiter over a job because it may have the consequence that, separated from the accustomed environment, they are temporarily transferred to another workshop or are employed in a job other than their skill. ("Which skilled fitter likes to sweep the courtyard instead of doing assembly work?") Thus the enterprise, when in the past it tolerated deficiencies in work organization, brought about itself those tricks of performance regulation that workers now apply in the given case, already independently of the actual level of organization, in the interest of their own objectives.

4 Workers Behavior and Informal Organization

The performance tactics of the factory unit's workers, thus the series of resolute actions of the sheet-metal workers, unambiguously led to the conclusion that there existed, apart from the formal organization, a kind of informal organization "materializing through invisible wires". There was no doubt that the described actions taking place in a collective form presupposed large-scale information, coordination as well as a uniform and efficient guidance. In other words, within the complex enterprise set-up (also comprising organizations of higher administration and social organs) there must have existed, inherently incorporated, another organization acting with at least partial independence and following special objectives, a well-greased machinery that organized and directed the workers' high-level collective activity. Sociologists call this organization in distinction from the formal economic organization, *informal organization*.[1]

The concept of workers' informal activity was introduced in industrial sociology by the human relations school. The systematic application of the categories "formal" and "informal" with respect to organizations began with C.I. Barnard's theory, which was confirmed by the empirical data supplied by F.J. Roethlisberger and J. Dickson. Since that time, informal organization as a concept, relating to an important aspect of industrial reality, has became generally established in industrial sociology.[2]

An especially favorable field for measuring the informal activity taking place among workers, and for disclosing their informal organization is provided by those plants where a piece-rate incentive system is applied, as is the case in the factory unit under study.[3]

An Approach to the Informal Organization

We have studied workers' informal organization by the very simple method of a sociometric choice test which is well-known and has been applied for several decades. This test is a very sensitive instrument transmitting signals from the internal, "intimate" life of groups, uncovering the hidden network of human relations (which will be important for our further investigations), and also revealing the links of integrated interest among people and the lines of concentration of informal power.[4]

The sociometric choice test was carried out as follows: each worker was asked whom he would choose and whom he would discard if he were assigned, under the given production relations, the task of organizing a new brigade out of his present fellow-workers. In putting this question we had to place special emphasis on each word and to explain everything. We asked about "fellow-worker relations" and not about relations largely independent of the factory unit, of production, or of wages. We also underlined the need for making a selection under the prevailing shopfloor conditions. Some workers (specially sheet-metal workers) told us: "If we had the chance, we would select the best skilled workers because we prefer good work. But the work at the plant is such that one is told to stop when a certain percentage is reached, and there is no possibility of taking pains to produce the best. At the same time, we may cause serious trouble (piece-rate resetting) when we are too much absorbed in work." Thus, in choosing the members of their supposed work group, the workers considered who of their fellow-workers cooperated with them and who did not in the key questions of performance and wages. Thus, mutual choices as disclosed by means of the sociometric choice test revealed identical or very similar attitudes, behavior and interests toward work and money, while mutual refusals reflected opposing attitudes, behavior and conflicting interests, expressing the readiness of cooperation on the performance and wage issues in the first place and its absence in the latter.

The characteristics—strength, stability, size—of the workers' informal organization were virtually reflected jointly by the number and placement (structure) of mutual choices.

If mutual choices were located in a chain-like fashion, that is, if they connected only two persons each, the informal organization was unstable and weak. Since only a set of workers could cooperate adequately, a generally coordinated and centrally directed action was impossible. (For example: it was a chain-like structure when A was linked to B, D to C, C to D by mutual selection. In this case, cooperation between A and D, the persons at the two extreme ends of the chain, was not ensured appropriately, and not a single worker out of the four was in a position to carry on a coordinating, guiding activity.)

An abrupt change toward a stable, strong informal structure came with the appearance of the cliques. (The word *clique*, contrary to its common usage, is not attached any pejorative meaning whatsoever, we apply it only for lack of an appropriate Hungarian term.) In the clique

consisting of at least three members, all members are tied to one another by mutual choice, hence cooperation, a coordinated action of the members is absolutely ensured. (For example: in a four-member clique, A is tied to B, C, and D, while B is tied to A, C, and D and C is tied to A, B, and D respectively.)

In the factory unit the analysis of the informal organization is justified primarily at the level of individual vocations as the performance or wage tactics occupying a central position in the activity of the informal organization can be assessed as a "response" to the enterprise's incentive policy according to vocation. At the same time it is worthwhile to pay attention to the group structure of the informal organization since the earnings of the individuals depended in the short run on the performance level and wage fund produced by the group rather than the vocation as a whole. Hence the situation was such that the incentive measures of the enterprise management (overtime, target bonuses, output standards, etc.) affected the individual trades, but it was the work group that served as an "accounting" unit.

Informal structures in the Trades

In the factory unit, the informal structure of the individual trades showed the characteristics listed in Table 14.

From the per capita number of mutual selections and of the cliques the conclusion may be drawn that the informal structure among sheet-metal workers was highly developed, while among assemblers it was also fairly stable, though somewhat weaker. At the same time, the informal structure was hardly developed at all among component fitters: no cliques were formed and the number of mutual choices per person was low. This picture is made more explicit by analyzing the structure and the location of mutual selections.

The 59 sheet-metal workers of the factory unit consisted of three groups: the Cziffra group (27 members), the Ferenczi group (27 members) and the Oláh group (5 members). The task of the two former groups was to level the side parts and that of the latter group to level the roofs of the railway coaches. The majority of mutual choices concentrated on the Cziffra group. Eight close cliques of the Cziffra group constituted the "brain trust", the guiding center of the whole trade.

With this extremely strong informal center neither the chain-like structure of the Ferenczi group nor the single clique of the tiny Oláh

Table 14: Informal Structures of the Individual Trades

Trade	Number of workers	Within the group			Among the groups		
		per capita mutual		number of cliques	per capita mutual		number of cliques
		choice	refusals		choice	refusals	
Sheet-metal workers	59	1.02	0.15	9	0.14	–	2
Assemblers	82	0.72	0.12	12	0.08	–	1
Component fitters	19	0.47	–	–	0.05	–	–
Average	(160)	0.80	0.12	(21)	0.10	–	(3)

group were able to compete. Moreover, the chain-like structure of the Ferenczi group itself was tied through several threads of mutual choice to the extremely closed and firm core of the Cziffra group. Hence, the structure of the informal organization in the case of the sheet-metal workers was almost monolithic.

By contrast, the assemblers' trade with its 82 members showed the features of a multiple division. The individual units of work organization were strictly separated. Internally, the assemblers (the 9-member Engel, the 6-member Honner and the 9-member Lázár groups) had one single central clique which comprised four members of the Engel and Honner groups. The two cliques of the Lázár group had no relation whatsoever with this central clique. The coach side and roof assemblers and setters (the 19-member Jancsek, the 15-member Neumann and the 10-member Péteri groups), had no coherent informal structure. In the Jancsek group there was one clique, in the Neumann group, separated from the rest, four cliques, while in the Péteri group no clique operated at all. The front-part assemblers had one single 14 member group (the Trencsényi group), in which four cliques established an independent informal center. Thus the skilled assemblers, inside and front-part assemblers, had strong, but isolated informal structures.

The 19-member group of skilled component fitters had a completely undeveloped informal structure. There were no cliques and they had no informal guiding center. In the three groups (the 7-member Antal, the 5-member Benkő and the 7-member Rónai groups) there were only

chain-like structures. (The sociometric figures relevant to the chapter can be found in the Appendix.)

The Informal Structure and the Foreman

From the point of view of the informal structure, the relation to the foreman was not irrelevant either, notably depending on whether he was a member of the informal organization, was neutral as an outsider, or was opposed to it. We have measured the relations to the foreman by the so-called piece-rate orientation survey.[5]

The rate-orientation survey was directed essentially toward the very important question of whether in a conflict situation—in the case of a performance or wage conflict—workers took into consideration the view of the foreman or of their own fellow-workers. The index of vertical orientation reflected the extent to which workers followed the foreman's advice, while the horizontal orientation indicated the degree to which they listened to their fellow-workers. For a given trade (group), the interrelations of vertical and horizontal orientations expressed the contact between the foreman and his subordinates and by that with the informal organization. If the vertical value was more favorable than the horizontal one, or was equivalent to it, it meant that the workers greatly relied on their foreman. If, however, the vertical index was weaker than the horizontal one, it meant that the foreman's standpoint was largely "indifferent" to the workers. If the vertical index was much weaker than the horizontal one, this indicated that the workers were opposed to their foreman. (All this illustrates only roughly the content of the indices, because to avoid superfluous complications, we do not wish to dwell on details.) What was the situation like within the individual trades?

In the vocational groups supervised by the individual foremen, the differences (1–2) between the horizontal (1) and the vertical (2) indices were as it is displayed on the next page.

As the data show, the workers' cohesion within the groups was, as a rule, much stronger than their relation to the foreman. The questionnaire interviews and the unstructured talks also revealed that the relations between the sheet-metal workers and their two foremen were rather hostile. The workers were sharply opposed to their superiors in the crucial questions of performance and wage level.

Among the assemblers, the relation of the Engel and Lázár groups to their foremen was tolerably good, while that of the Trencsényi group

Sheet-metal workers (Cziffra, Ferenczi and Oláh groups)	+0.85
Assemblers I (Engel, Honner and Lázár groups)	0.00
Assemblers II (Jancsek, Neumann and Péteri groups)	+0.20
Assemblers III (Trencsényi group)	−0.78
Component fitters (Antal, Benkő and Rónai groups)	+0.11

Note: The maximum possible difference between the two indices was ±4.

to its foreman was extremely good. In the first case, the foreman was a member of the inner-group clique made up of the members of the Honner and Engel groups and also maintained good relations with the cliques of the Lázár group. In the latter case, the foreman was closely tied to the tightly interrelated cliques of the Trencsényi group. This was the only case in which members of a group, being very coherent, listened to their supervisor even more than to their own fellow-workers. The foreman exercising supervision over the Jancsek, Neumann and Péteri groups was indifferent to the men just as the foreman of the component fitters was to his subordinates.

Performance Tactics and the Informal Organization—Workers' Stratification

There was a close interrelationship[6] between the informal structures of the individual trades and the performance tactics applied by them.

The performance and wage tactics of the sheet-metal workers were "perfect" in kind: the "aggressive" and the "defensive" elements were

equally highly developed and in consonance with each other. The organization and coordination needed were ensured by the extremely developed, uniform and centrally directed informal organization. The informal organization was in opposition to the foremen.

The tactics applied by the assemblers were not as "perfect" as that of the sheet-metal workers: its "aggressive" elements were less developed and the "defensive" elements were even less so, and the necessary consonance between them was lacking. And behind them was a developed but widely spread informal structure.

Interior assemblers, the assemblers of the frontal parts, the roofs, and the side parts of the railway coaches, as well as the setters acted in isolation and independently of one another. The necessary informal organization and concerted action within the trade were lacking. At the same time, the foremen were also present in the informal organization of interior assemblers and of assemblers of the frontal parts, while they were not in the third unit, in that of the roof and side-part fitters and setters.

The component fitters did not resort to tactics at all. They would not have been able to do so, by the way, as their informal structure was entirely undeveloped. Both individual workers and foremen acted in complete isolation.

The description of the informal organization also makes it possible to approach from the "organizational" side those behavioral differences *that appear* in relation to the performance and wage tactics *between individuals and their groupings within the various trades*. Approached from this angle, the workers within the trades can be divided into the following strata:

1. The leading stratum (in short, cliques)
2. Those attending to the leading stratum (the attendants)
3. The peripheral stratum (the periphery)
4. The opposition stratum (the opposition)

With the sheet-metal workers and the assemblers it was generally the membership of the cliques, the core of the informal organization, that provided the leading stratum. This stratum implemented, in one variety or another, the performance and wage tactics. In this activity it was

largely supported by the "attendants". They themselves were not members of the cliques, but were tied to the clique members by mutual choice. The "periphery" meant the stratum that was not tied anywhere by way of mutual choice. It was left out of the system of mutual selections and was practically isolated. Typical of the behavior of the periphery with respect to the tactics of the dominant cliques was neutrality: they showed conformable behavior toward the cliques. The opposition, on the other hand, did not approve of the tactics applied by the cliques. Those workers who constituted an informal structure against, or independently of, the dominant cliques (i.e. those who were united by mutual selection) were regarded as belonging to the opposition.

Among the sheet-metal workers the eight, closely interrelated cliques of the Cziffra group and the single clique of the Oláh group constituted the leading members. The former had an extensive body of "attendants". The "opposition" was made up of the workers in the chains of the Ferenczi group on whose initiative, following the performance reduction in April 1968, the Cziffra and the Ferenczi groups were established with the division of the side-part levelling group. The rest constituted the periphery.

Among the component fitters, the leading members came from the interbrigade clique (reinforced by the foreman) of the Engel and Honner groups, from the two cliques of the Lázár group, from the single clique of the Jancsek group, from the four intertwined cliques of the Neumann group, and from the closely interrelated four cliques (also reinforced by one foreman) of the Trencsényi group.

Here the leading stratum was also joined by the "attendants". There was a relatively strong opposition in the Honner group (one clique), in the Engel group (one chain) as well as in the Jancsek and the Péteri groups (one connected chain). In addition to all this there was the periphery.

Among the component fitters, owing to the undeveloped state of their informal organization, such a stratification did not exist.

In overview, the ratio of the individual strata of sheet-metal workers and assemblers came to be established as shown in Table 15.

The Human Approach of the Formal Organization and the Informal Activity

The theoretical man-related concepts of enterprise operation are, by their very nature, generally extremely schematic, tending toward un-

Table 15: Ratio of the Individual Strata of Sheet-metal Workers and Assemblers

Trade	Number of employees	Leading stratum	Attendants	Periphery	Opposition
		percentage			
Sheet-metal workers	59	28.9	11.8	27.1	32.2
Assemblers	82	34.1	10.9	30.5	24.5

founded uniformity. This is nothing extraordinary, the enterprise being an "artificial formation" established on the basis of abstract principles (the principles of the division of labor, unity of control, etc.) to serve specific objectives and not the aims of the individual working in it. With schematic, uniform procedures belonging to its essence, its approach to men can be expected accordingly.

All this does not mean, of course, that no differentiated judgment of its employees' qualities is made. Also such data as occupational qualification, length of previous job practice, number of earlier workplaces, all components of income, marital status, number of children, age and so on are kept in evidence. But the enterprise generally registers its workers, whether clad in blue or yellow overalls, as a homogeneous group.

To the enterprise managers, workers represent, as a rule, economic entities who are ready unconditionally to do everything within the limits of their physiological capabilities for increasing their economic benefits (earning as much money as possible). This is, in essence, the human aspect of the Tayloristic scientific management.

It is largely justified and right, but not completely so. The workers are aware not only of their economic benefit as such but also of its relation to labor input. In addition, not all workers are equally interested in material benefits.

Social organizations also handle workers as a homogeneous group. But in their view, the worker, whose economic motives are fully known, is rather a person in whose activity consciousness, conviction and consistent commitment may play a prominent role. It is for this reason that people act in a uniform way. To a certain extent, this approach is also a justified and rightful way of looking at things. In the case of workers,

consciousness may play an important role even if its actual content does not always coincide with the expected one. In the judgment of people pertinent to the formal organizations, the elements of the schematic and uniform handling of workers have of course not gained absolute predominance. All formal organizations grant a certain scope for individual qualities. From the point or view of the enterprise there are "diligent", "honest", as well as "lazy" and "vagabond" workers. The social organizations also distinguish "conscious" and "still not sufficiently conscious" workers. Hence, the patterns of workers' behavior expected by the formal organizations are regarded as general, regular and normal, while the others are taken to be accidental and individualist (negative).

The schematic judgment of the individuals is also reflected in the way the collectives are approached. In the view of the enterprise management the groups of men performing collective activity are always considered as "formal" collectives: plants, workshops, trades, work groups, etc. The situation is similar in the case of the trade unions. Further on, such groupings as the socialist brigade, although created on the workers' voluntary initiative, are also registered as formal organizations.

So far we, too, have been speaking about formal collectives: trades and work groups. In some respects, collectives may really be strictly delimited by formal concepts. But there are others that go beyond any such classifications. These are, for-example, the informal organization, and the cliques whose existence often leaves out of account any formal limits, or the individual workers' strata—the leading stratum, the attendants, the periphery and the opposition—already essentially transgressing a brigade or trade. This inevitably questions the formal organization's judgment of the individuals. There are workers who, in consonance with the enterprise's ideas, make every effort to increase their economic benefits (component fitters). There are, on the other hand, also others applying tactics by various methods and in different styles (the sheet-metal workers and the assemblers). But the latter do not uniformly resort to tactics. Moreover, there are trade union members, functionaries, party members, etc. both among workers who do and those who do not apply tactics.

The formal organizations' way of judging people is schematic. It does not show what people are like but what they would wish them to be. Formal organizations as "artificial" institutions established to fulfill specific objectives have created an ideal image of people corresponding to their demands. Since, however, peoples' aims do no necessarily coincide

with those of formal organizations, this ideal image is incredibly inadequate. Its deviation from reality is consequently by far not an individual and accidental phenomenon, but absolutely regular and general. This is evidenced first of all by the informal organization that came to be established within the formal organization.[7]

The informal organization, in contrast to formal organizations, is a natural one that came about not on an "outside" initiative for the fulfillment of specific objectives but on the members' own initiative for the fulfillment of their own objectives.

Since in the structure of workers' demands it is the economic requirements that play a dominant role (in which, as we have said before, the enterprise's judgment of people was partly right), the activity of the informal organization is directed primarily toward influencing the factors relating to the members' economic position (in the concrete case: toward the performance and wage levels, the level of performance requirements, etc.). The informal organization tries to provide protection to its members against the environment created by the formal organization: it ensures the conditions for its members enabling them to make efforts to enforce their demands, gives them access to information, ensures the collective evaluation of the signals received and, on the basis of this evaluation, the implementation of collective action. It also exerts control over its own members so that it may influence their socioeconomic environment. Along with interest protection, the informal organization also satisfies nonmaterial needs (social life, the demand for belonging somewhere, etc.).[8]

So as to fulfill its role, the informal organization (like formal organizations) has a firm internal structure, which is set up not according to abstract considerations, but directly according to the members' demands.[9] The division of functions also prevails within the informal organization: there are leaders who coordinate and direct the activities of its membership, and there are also subordinates. There exist relations of sub- and superordination, and people's activities and behavior are regulated by rules. The flow of information takes place through definite, peculiar channels; decision making also has an accurately outlined mechanist. In addition, the informal organization also has its own control mechanism: it can reward and penalize its members' activities. To put it briefly, it is an organization in the organization, and even within organizations. Although it is not closely related to our subject, we wish to mention that there exists an informal organization not only between workers and

the lower-level managers, but also in the highest sphere of enterprise management.

For an illustration of the above, let us take, for example, the sheet-metal workers. The informal center of that trade was the Cziffra group, consisting of eight closely interrelated cliques (13 men) and of members immediately attending to them (7 men). Within the group a narrower collective leadership—the "six"—developed (see the sociometric figure in Appendix). The "six" enjoyed the membership in the majority of the cliques, and the attendants almost exclusively supported them. The six directed and coordinated the workers' joint actions with great efficiency.

The personal composition of the "six" was very interesting and presumably not accidental. All of them were highly skilled, diligent, hard-working men. The most important among them was a man of a withdrawn nature, who never spoke in the discussions with the factory unit's management, always kept a cool head and tried to settle things to the satisfaction of all workers both inside and outside the cliques, while still remaining more or less acceptable to the management. He had a special gift for "compromises". The extent of his popularity and authority in the Cziffra group was extremely great, and in questions relating to tactics he was also highly regarded by many members of the otherwise opposed cliques of the Ferenczi group. Two other members of the "six" also had, like him, a natural talent for "compromises". The fourth and fifth members were regarded "a bit boastful of their knowledge", but otherwise "they were good pals". It was these men who "banged the table with their fists", conducted heated debates with the management, and "persisted in their opinion and did not budge an inch". An interesting personality was the sixth member (a trade union steward), whom the workers called "a man with the gift of the gab", a "great philosopher". If there were problems, the factory unit management always arrived at an agreement with him, and only when he left office did the foremen realize that he had not given up a lot in his position and things were where they had been before. These members of the "six" were also rather popular in the Ferenczi group.

It might appear to be superfluous to discuss the characteristics of six men in such a detailed way, but without knowing them it can hardly be understood how the Cziffra group and the sheet-metal workers in general were able in the most extreme cases—amidst economic pressure, threats, and later in view of promising economic advantages and entreaties—to preserve their autonomous, absolutely resolute capability of action. In

the group of sheet-metal workers decisions were made in essence by the "six" or the cliques. The word of the six always carried greater weight than that of the other clique members. Of the information channels we wish to mention just a few: the trade union steward (trade union line) among the "six", the group leader (management line) in the clique, as well as two party members or workers' militiamen (party line). The informal organization elaborated its code of rules, which the workers formulated in simple, slogan-like sentences. For example, concerning unity: "one for all and all for one"; "principle and money can be defended only by a massive action; individual struggle is doomed to failure". Concerning performance there were the statements: "We work much and hard, but only if we see the point of it; man is not a machine". "Working like hell has no sense. If I fulfill 140 per cent today, they will withhold it from my wage tomorrow." "Avoid any haste: you should think twice before you lift the hammer once." "If somebody drives senselessly, he wants to please the boss. And we don't like it." "People given to senseless driving, have floater blood in their veins; they reap what they can and leave, leaving the rest of workers in a mess." It was included in the rules that only "reliable" men could be initiated into the secrets and taught the knacks of the skill of sheet-metal work.

The informal organization of the sheet-metal workers did not tolerate workers infringing upon its code of rules. It was, among other things, for this reason that in May 1968 the Ferenczi group broke away from the Cziffra group dominated by the informal organization because the members of the Ferenczi brigade tried in April to undermine the "demonstrative" restriction of output of the cliques. Since, however, the cliques had previously found these workers to be "unreliable" and had not initiated them into the secrets of the skill, the "opposition" united in the Ferenczi group worked in vain so hard that "they were dripping with sweat, they were unable to produce."[10] All this did not mean that the relations between the two groups broke off. The rules of informal organization were flexible and clever.

The best example of the flexibility of rules was provided by the case of a clique member of the Cziffra group. The management of the factory unit singled him out, and loaded him with material and other benefits. The informal organization, however, did not ostracize him, but put him in a harmless position (originally he might have been a member of the collective leadership). For they were fully aware of the value of information from the channels of production administration and of the

party organization that the man could impart to them. Then it was recognized in the management of the factory unit that the workers could make better use of their man than they themselves.[11]

Summary

Summarizing the facts outlined above, we may state that along with having firm structures of the formal organizations within the enterprise, there also existed an informal organization, similarly endowed with a stable internal structure. A significant part of the workers adjusted their activities not to the rules laid down by the formal organizations but primarily to the rules of the informal organizations. Formulated from an organizational point of view, this was the phenomenon when workers displayed a "negative" behavior, that is, their activity deviated from the objectives set by the enterprise. And this deviation was, as also shown by the existence of the informal organization, not an accidental and unique, but a regular and general process. (Which demonstrates at the same time that the uniform way in which the formal organizations assessed the workers and collectives was basically wrong.)

In the following our task is to analyze those social and economic factors that produced the informal organization within the formal one and filled both with motive power, which took place in such a way that the movement of the informal structure came to be confronted, at least partly, with the formal structure. This set of questions also involves the discussion of the highly important problem of how the control mechanism of the formal organization (as an important factor of the economic environment) and the distortions experienced in it (as described in Chapter 2 of our study) led to the formation of the formal and informal dichotomy, the creation of confrontation and the various types of workers' behavior.

We approach the motive forces behind people who took an active part in creating the informal organization or were left out of it through the analysis of three comprehensive categories: interest, power, and transaction. We assume that in the final analysis the impacts of social and economic environment concentrate on these categories. We think that the patterns of behavior described above are the joint products or surface symptoms of the dynamic movement of differing and opposing interests and of the power poles behind them—products of transitory clashes and compromises or of lasting conflicts of interests, of the temporary disturbances and reestablishment of lasting disequilibrium between power poles, and of the resulting transactions.

Notes

1. Melville Dalton suggests that a distinction be made between the concepts of "informal" and "inofficial". He regards as inofficial those units of the informal organization whose existence the enterprise management has already taken into account and which it has already considered when elaborating its policy and taking its measures. Such informal units, cliques, have already turned de facto formal; only their official recognition is lacking. Such a case was, as suggested by several indications, the sheet-metal workers' clique in the factory unit discussed. In our study, to avoid any superfluous complications, we disregarded making this distinction, though we readily admit its justification. See M. Dalton, *Men who Manage* (New York: Wiley, 1959) p. 222.

2. C.I. Barnard, *Functions of the Executive* (Cambridge: Harvard University Press, 1938); F.J. Roethlisberger and J. Dickson, *Management and the Worker* (Cambridge: Harvard University Press, 1919).

3. The piece-rate system, in which the workers' and work groups' earnings may change from month to month as a function of both their own efforts and of various incentive factors, provides much more maneuvering possibilities both for the workers and the management than the time-rate system in which the earnings are largely fixed on a long-term basis. The workers' informal activity manifests itself as a rule, exactly in such maneuvering. The classical cases illustrating the interconnections between workers' behavior and informal organizations stem from the piece-rate field. See G.C. Homans, *The Human Group* (New York: Harcourt, 1950); W.J. Dickson and F.J. Roethlisberger, *Counselling in an Organization. A Sequel to the Hawthorn Researches* (Boston: Harvard University Press, 1956) Both works discuss cases from studies conducted in the Western Electric Company. Also noteworthy is the relevant research by Donald Roy and Orvin Collins which, along with other cases, is made known by W.F. Whyte in several of his books: *Money and Motivation* (New York: Harper, 1955), *Men at Work*, (Homewood, Ill.: Irwin-Dorsey, 1964), *Organizational Behavior* (Homewood, Ill.: Irwin-Dorsey, 1969).

4. G. Bastin, *Les techniques sociometriques* (Paris: Presses Universitaires de France, 1966); I. Pataki, *Csoportlélektan* (Group psychology), (Budapest: Gondolat, 1969).

5. For the problems of piece-rate orientation see: Whyte, *Men at Work* (op. cit.), p. 543.

6. A more thorough analysis of interactions also requires the discussion of interest and power relations and of transactions, which we shall deal with in the subsequent parts of our study. Here we are mentioning only the facts manifesting themselves on the "surface", which prove the existence of the relationship without expressing its varied and complex nature. Bourgeois sociology has produced a large quantity of empirical materials of a similar "surface" character that underpin the existence of interconnections. (We have also made references in several parts of our study to cases described by Roy, Collins, Homans, Roethlisberger, Dickson, Seashore, etc.)

7. Taylor himself saw the problems of his system, but it was not the theory of scientific management that he adjusted to reality but he tried to force people into his system. He distinguished two types of restriction of output. The one, which did not represent any special problem, stemmed, in his view, from the people's "natural instinct", being "inclined to follow the line of least resistance". The other, which gave him real trouble, was the "systematic" restriction of output, the source and motive of which were man's "relations with another man." (We wish to note that the economic and social leaders of our country generally acknowledge only the existence of the first one.) The solution Taylor suggested was to liquidate, as far as possible, the foundations of "systematic" dodging by isolating the worker concerned: in space, by separating him from the rest; socially, by applying differentiated material incentives; psychologically, by emphasizing his dependence on the rules and instructions. Although Taylor's solution is unacceptable, he was able to approach his ideal in certain types of work. Thus, for example, in some foundry work he could isolate men in space by selecting such men who reacted sensitively to money incentives and were not sensitive to social pressure, etc. R. T. Golembiewski, *Small Groups and Large Organizations*, J.G. March, *Handbook of Organizations* (Chicago: Rand McNelly, 1965), p. 106.

8. For functions of the informal organization see R.T. Golembiewski, *The Small Group: An analysis of Research Concepts and Operations*, (Chicago: The University of Chicago Press, 1962), p. 164.

9. As regards its content, the clique is an informal unit and, what is more, a unit that has an immanent informal set-up, a relatively well discernible structure: its objectives are in part conscious, in part not; contacts within the group are personal; the criteria of belonging to the group are tied to rank, status, age, social origin, or to their optional combination. It is relatively stable and lasting, less dependent on the individual members and is of a more or less closed character. Hence, the clique is an informal unit with a particularly stable and well-established profile. R. Mayntz, Az ipari üzem informális szervezete. Üzemszociológia (The informal organization of the plant. Plant sociology) (Budapest: Közgazdasági és Jogi Könyvkiadó, 1969), p. 125.

10. Keeping secret the knacks of the skill is a type of informal behavior well-known to outsiders. Frank Miller experienced the following case among the glaziers of Shawcross Corporation: "When the old workers saw that the young were having difficulties in coping with a new and more complicated piece, they watched them from a distance with badly concealed satisfaction. When the young people asked them for advice, the older ones were always too busy to discuss the problem with them and to observe their work. In another case, the suggestion they gave to the young asking them for advice was that they had known in advance it would cause further technical difficulties to them. At the time of our research we got to know about this phenomenon only from interviews, as by that time the situation has already changed. Young people had stopped asking the old about the knacks by which they could have improved their occupational skill." In connection with the case Whyte remarks that things like that can only occur at the "handicraft" level of the development of industrial technology. This also applied to the sheet-metal workers discussed in our study. Whyte, *Men at Work*, (op. cit.).

11. The worker concerned was also appointed group leader. In the spring of 1971 the group relieved him of his post.

5 Interest Relations in the Enterprise and its Environment

Interests in General

With respect to interest relations it was assumed in our country for a long time that people's interests—under socialist conditions—automatically coincided with the general interests of socioeconomic development. This gave rise to two further assumptions:

1. that the interests of the economic units were automatically in conformity both with each other and with the interests of the national economy, and,

2. that the interests of the individual strata within the enterprise were also automatically in harmony with each other.

In other words, what was good for one enterprise was also good for the other, and what was good for managers was also good for workers. In the meantime, it has turned out that this is not quite the case: people, whether enterprise managers or workers, do not adapt their everyday activities to some general interest, but their behavior follows the particular interests determined by their direct socioeconomic environment. And since the socioeconomic environment at a level of socioeconomic development as in Hungary is extremely complex and differentiated, the particular interests are different from and opposed to each other.[1]

From a sociological point of view, the economic reform introduced in 1968 is based on the revision of the earlier incorrect assumption concerning interest relations. The series of measures taken by the new system of economic management is intended to create, at the levels of the national economy and the individual enterprises, conditions under which the particular interests determined by the socioeconomic environment increasingly correspond to the requirements of socioeconomic development. The economic reform has "legalized" the very strong economic interests of people: it has made the material advantages enjoyed by the enterprises dependent on the efficiency and profitability of their economic activities, on the quantity of the goods produced. By means of price, credit, income, investments, and social policies, hence by indirect regulation, they act to satisfy higher-order objectives.

This system does not exclude the existence of interest conflicts among the individual enterprises nor within them. Thus certain conflicts within the enterprise are bound to appear. The interests of managers, for example, are first of all oriented toward profits, while those of the workers concentrate on wage increases. The two categories are, by their very nature, opposed to each other. At the same time, they also complement each other as both profits and wage increases are a function of successful economic activity, which can hardly be imagined without the compromise of managers' and workers' interests, that is, without their cooperation. In practice, the situation is of course much more complicated.

The question is this: What has elicited the repeated interest conflicts at the given enterprise between the workers and the management, on the one hand, and among the individual workers' strata on the other? Furthermore, with which agents of the socioeconomic environment, with which factors outside and inside the plant were these conflicts connected?

A complete analysis of the interest relations within the enterprise would be a task going far beyond our capability. Therefore, we shall concentrate our attention on the critical question of workers' performance and wages, and will examine the interests within the factory from that angle. This means that the presentation of interests proceeding from the higher management to the party most directly affected, the labor force, will be increasingly differentiated and more and more elaborate.

The enterprise under discussion is one of the most dynamically developing plants in Hungary. By developing the manufacturing of heavy-duty diesel engines, it has introduced perhaps the most up-to-date technology of Hungarian engineering and has taken the boldest step toward a more and more efficient economic activity. The factory's organization is of a very high level, and the management makes every effort to utilize any idle reserve capacities. Under such circumstances, many people think that with the technological development, with the improvement of work organization, the role of the labor force may lose, from the point of view of efficiency, much of its importance, referring to the fact that the ratio of wage costs to the prime costs of products is minimal. This is really true of the modern plant units of the enterprise. Yet it is inappropriate to play down the role of labor in relation to technology, simply because the two have merged inseparably. We shall illustrate our statement by a negative example: One of our enterprises bought a heavy-duty press: the manufacturing firm had allowed 6 seconds per piece. The enterprise, under the workers' pressure, was compelled to reset the standard time

to 20 seconds. Obviously, the difference appears not only in wage costs. Hence, the workers' performance in quantity (and quality) is of primary importance.

The Interests of the Enterprise Management

In questions relating to work performance and wage level both interested parties of the higher management, the production line (production department, manager of the factory unit) and the labor line (concerned with all questions of personnel, wage and piece rates) had a very definite standpoint and interest. For not only the relatively large profit shares, bonuses and the prestige of the work force depended on these questions, but also—owing to the strict enterprise management—their position. At the same time, these interests were by far not homogeneous.

The production line pushed continuously for a balanced output so that the enterprise should be able to fulfill its annual plan—to deliver its products in time, in the appropriate quantity and quality. It was the task of the production department to supervise the output indices of the individual factory units, and it was closely connected with all functional departments of a technical character on whose activity the results depended, i.e. with the departments engaged in technological and technical-developmental questions, in construction, material supply, programming, labor- and wage affairs, etc. Since the technology applied in manufacturing railway coaches was traditional and the enterprise neither intended nor was in a position to develop it further, organizational problems rarely occurred (material supply, etc.). With respect to the output indices, there were continual conflicts and difficulties, primarily with the labor department. At the same time, the labor department was involved in the production problems of several fields.

The personnel department was affected only indirectly by output problems, which were the responsibility of the production line. But it was in this department that the constant grievances originating from the production line accumulated: there were not enough men available and those who were could not appropriately be paid by the factory units. The personnel department handled the various demands concerning manpower, and the allocation of pay, overtime, and target bonus. The complaints from the factory units working in a time-rate system were also addressed to the personnel department, claiming that the piece-rate areas had deprived them of their wage development funds (in 1968, for example, the factory unit in question transgressed the agreed wage level

by about two forints). It was also to the personnel department that protests were addressed against the piece-rate factory units, claiming that their wage level had been cut. But also the technical and clerical employees also turned to this department complaining that they were poorly paid relative to the manual workers.

Thus the personnel department, owing to the pressure imposed on it by people from so many quarters, was seriously plagued. The difficulty of its situation was further aggravated (or caused) by two macro-economic factors:

1. Since 1967, the labor turnover, affecting all strata of the factory's manual personnel, had increased to an extraordinary extent. Masses of skilled, semiskilled and unskilled workers left the enterprise for other factories in the town or for cooperative establishments nearby. In 1968–69, the number of the manual staff significantly dropped in absolute terms, and the necessary supply was not ensured. (The long-term development concept for the sectors applying new technology made it possible to reduce the personnel, but in the short run–thus in 1968–69—it did not cope with the problem of releases. The solution was debatable even in the long run as the labor turnover also siphoned off a significant part of the best workers, the core staff.)

2. The economic regulator of average wage control strictly fixed the per capita average pay. This meant that the enterprise was unable to replace the missing personnel (whose lack was, as many thought, completely fictitious) by paying more to the workers currently employed. (Sheet-metal workers, for example, declared that they would be able to produce more "for reasonable wages" even without overtime.) The personnel department thus was simply not in a position to finance the "run-away" wages of the piece-rate areas, unless at the cost of the units working in the time-rate system. (From the point of view of the enterprise, little improvement was achieved in this question by the corrections carried out in the average wage control system during 1970 and 1971.)

What could the personnel department do in this situation?

1. Since, owing to the central regulation of the average wage rate, the wage level was the most allergic point of the department, it concentrated on that point. It was primarily due to this fact that

in the incentive policy of the labor management, wage rates came to the fore and performance requirements occupied only a secondary position.

2. For observing the prescribed wage level and for keeping the wage proportions, the personnel department applied primarily the means of rate setting. This policy was based on several realistic considerations:

   (a) Wages always rose sharply on the "piece-rate" side. If the labor management tried to prevent this, for example by fixing a performance or wage ceiling, the production problems caused by labor shortages, would not be solved, and the workers, lacking future perspectives, would leave in still larger numbers.

   (b) The tightening of piece rates solved the labor shortage to a certain extent, because a 20 percent restriction led, roughly computed, to the same result as a 20 percent manpower increase. Thus, the resetting of piece rates was the best way both to keep the wage level and to preserve the desired wage proportions.

3. In the policy of the personnel department, the regulation of personal wage rates played a secondary, although important role. Personal hourly wages did not affect the wage level directly in the time-rate area, and did not affect it at all in the piece-rate area. The fact that the personnel department paid careful attention to changes in personal wage rates in the piece-rate areas was virtually a maneuver misleading workers in the time-rate fields. The work force engaged there was thinking in terms of personal wage rates and had no clear view of the extremely complex structure of the piece-rate areas; thus the relatively low personal wage rates in the piece-rate fields might have made them believe that the wage proportions were appropriate. This also had another substantial significance since the workers took their personal wage rates with them when changing jobs. The relatively low personal wage rates in the piece-rate areas, which were, by the way, practically fully independent of the level of hourly earnings, did not stimulate workers to leave their workplaces.

4. Since the personnel department acted under the joint pressure of coping with a personnel shortage and maintaining the average wage, it necessarily followed that the earnings differentials of the trades, work groups, and workers were bound to be reduced. For if the minimum earnings established in the labor market (7 to 7.50 forints per hour in 1969) far exceeded the theoretically prescribed minimum (4 forints) and the average earnings corresponding to the theoretical scale (about 10 forints), this necessarily brought with it the scaling down of maximum earnings. This manifested itself in all incentive factors. In 1964, the enterprise still registered some grade I jobs, but in 1969 this grade was no longer included in the collective contract. Moreover, the number of grade II jobs as well as the number of grade VII jobs (the highest category) was falling. (Earlier, there had also been grade VIII jobs.) Likewise, while the factory unit in principle could have set 4 forints as the hourly wages for unskilled workers, there were hardly any rates below 6 to 7 forints. On the other hand, the rates of the best skilled workers in principle could have reached as much as 11.50 forints, but in fact they did not even reach 10 forints. Such a narrowing down of the differentiation scale also had its effect on the practice of rate setting because that affected the performance of the hardest-working collectives, while sparing the weaker ones (or those applying tactics).

5. As the personnel department was forced to maintain the wage level tenaciously against the direct pressure of the factory unit, the production department, and even the workers, it was only natural that it increasingly drew into its competence and centralized the related rights of decision-making (setting of piece rates, changing personal wage rates), even if it had not the full information necessary for taking such decisions (see Chapter 8).

The enterprise's performance and wage-level policies was the product of the peculiar equilibrium game that, under the circumstances of the enterprise's operation, was continued year to year between the labor and the production lines. If at the end of the year, the personnel department found that the wages in certain fields had run ahead and the wage proportions had been upset, at the beginning of the next year it resorted to wage-restricting measures. In early 1968, for example, it cut overtime and did not set target bonuses in the factory unit; at the beginning of

1969 it tightened the piece rates and decreased the measure of wage progression for sheet-metal workers, etc. At that time the production line was passive because, since it was only the first quarter of the year, the fulfillment of the plan was not yet a pressing issue. Production problems emerged, as a result of the wage restriction measures, in the second quarter of the year (a fall in production in certain places, high labor-turnover rates, etc.). Then the management of the factory unit or the production department began worrying and urged the personnel department to provide more money or to supply additional labor.[3] Sooner or later, the department was compelled to relieve the wage tightening: overtime and target bonuses were allowed again and the output improved. By the end of the year, the minds in the personnel department were set at ease; the plan was fulfilled, but, owing to the run-away wages and resulting disproportions, the troubles were starting again.

The pressure exerted on the railway coach production, and with it on the factory unit concerned, also had motives relating to the enterprise as a whole that were more significant than the local interests of both the production and the labor line. The railway coach manufacture was—as already mentioned—"doomed to extinction". Market perspectives were unfavorable; the production was unprofitable: government subsidies, owing to measures of economic reform, were gradually withdrawn. But it was impossible to close down the sector, at least before the diesel engine production was fully developed. The enterprise was interested however, in reducing its prime costs even in this transitory period of several years. Under the given circumstances, the most practical way was the reduction of wage costs per unit of output. (Given a primitive technology, the wage ratio was relatively high.) That this intention existed on the part of the enterprise is best shown by the fact that it tightened primarily the piece rates of the (most loss-making) coach type that had received earlier the greatest amount of state subsidies. As a result of this measure the coach type in question became a "badly paying one" for the workers. Hence, the burdens of economic efficiency were almost directly devolved upon the workers.

The Interests of the Low-level Management

In questions of performance and wage level there were differences not only within the higher management (including the functional departments and the managers of the factory units) but also between the interests of the high- and the medium-level management.

The low-level managers (for the sake of simplicity we shall speak in the following about foremen only, while this category also includes senior foremen and plant managers) were basically indifferent to their workers' performance and wage levels. This was due, first of all, to the neglect of their material incentives. As outlined in Table 16, the incomes of the foremen were almost completely independent of the output of their subordinates, since 96.5 percent of their earnings was practically regarded as a fixed part (the combined proportions of monthly "fixed" earnings and profit sharing amounted to 92.1 percent). At the same time, the fixed earnings were not sufficiently differentiated: its standard deviation was only 4 percent, whereas in individual work groups it often amounted to 10 to 20 percent. Thus the enterprise materially attached much less value to the difference between the work of two foremen qualified to perform complicated managerial tasks than to that between two employees doing simple manual work.[4]

The foremen's contribution to increasing the performance level was a difficult task.

The workers' performance maximization and the wage losses caused by subsequent rate tightening always resulted in serious tensions among the workers, and the direct target of dissatisfaction was always the foreman. A situation might have evolved in which even the commonly accepted tasks (organization of work at an average level, ensurance of workshop order, maintenance at a satisfactory level of work discipline, observance of the rules of labor safety) were rather difficult. A similar situation was created by the reduction of performance resulting from wage cuts. In a situation like this, though the foreman had little to do with its emergence, it was always he who was "ordered into the office" and had to "face the music" and "quarrel with his workers". And he was unable to provide any help as everything depended on the capability of the manager of the factory unit and of the personnel department to acquire the money needed. In addition, he had no benefit from it. Moreover, the rise of the wage level resulting from an increasing performance level also offended his prestige since the foremen's income level compared to that of the workers, was rather low. In 1968, the average level of their fixed earnings was only by 20 percent higher than the earnings of their subordinates. (The comparable index of senior foremen was 35 percent and that of plant managers 48 percent.)

In the peak period, when the performance was highest, this difference further decreased. Given this relative earnings level, the pay of the best

skilled workers regularly surpassed the earnings or the foremen, and in the peak period even those of senior foremen and plant manager. The foremen justly regarded their material position as an undervaluing of their work, which also influenced their activity.

Table 16: The Foremen's Economic Incentive Situation

	Average weight of the components in the foremen's income	Average sum resulting from the individual components	Standard deviation	Relative deviation	Difference between maximum and minimum value
	%	forints		%	forints
Monthly fixed earnings	83.1	2,740	77	3.0	300
Quarterly reward	4.4	145	19	8.0	66
Target bonus	2.4	82	93	114.0	283
Reward from the manager's fund	1.1	38	37	98.0	96
Profit share	9.0	298	14	5.0	42
Total income	100.0	3,303	197	6.0	690

Note: These figures, computed from 1968 data, refer to nine foremen of the factory unit.

Data relating to the peak period of September 1968 provide a good illustration of the situation (see Table 16).

The wage tension between foremen and workers was further increased by the question of overtime as workers received substantially more overtime than foremen. In 1968 sheet-metal workers were assigned an average of 36.1 overtime hours per month, while their foremen were assigned only 6.5 hours; in the case of assembly workers and their foremen, the same index numbers were 20.1 and 3.1 respectively. The foremen of component fitters had no overtime at all (while the workers' share was 14.2 hours per month.).

Senior foremen and supervisors, the enterprise could not receive any

overtime according to the provisions of the collective contract.

Regarding the question of performance and wage levels, the interests of foremen differed from those of the managers of the factory unit and of the functional departments, and owing to their contradictory nature did not result in any definite and unambiguous action. Most of these supervisors were completely apathetic. Some of them (in order to keep peace and quiet) even helped their workers to use some tactics. These were usually well-paid employees who did not find the workers' high earnings disturbing. At the same time, there were others who, for prestige and other reasons, supported the wage restrictions.

Thus, lower-level management was a buffer stratum of rather unpredictable behavior in the conflicts of interests between the higher management and the workers, both contributing to and, occasionally, also mitigating the clashes.

Workers' Interests

The workers, as we have already pointed out, attached extraordinary significance to money and saw the almost exclusive purpose of working in the enterprise as acquiring and increasing their money incomes. They were mostly diligent people working very hard and well, who, to attain their objectives, were never reluctant to tackle any problem. All this does not contradict the fact that the employees of the factory unit, despite intensive agitation, did not accept unconditionally such objectives set by the enterprise management as improved economic efficiency and, accordingly, increased performance. They did not adjust their behavior primarily to the endeavors and the philosophy of the enterprise's higher management, but to the concrete socioeconomic circumstances in which they lived and worked day by day inside and outside the factory. And since this socioeconomic environment was highly differentiated, the interests of the individuals, even if included in one unit or work group, were different and often even opposed to each other. They took different positions on the performance and wage level issue and the work group's actions were opposed to the objectives of the enterprise.

In the course of our sociological explorations we attempted to disclose the socioeconomic circumstances that determine the content of workers' performance and wage related interests and attitudes. According to our research findings, the workers' interests (i.e. the interest relations of the work groups), owing to the extremely complex and differentiated nature

of the environment, are characterized by heterogeneity from the "moment of their birth". A very prominent role is played by the individual's material-economic and consciousness-based environment. (This human approach is one of the important points that is completely ignored in enterprises.)

As a result of the fact that at the time of our investigations the average income level had exceeded the subsistence level and the economy had reached a period in which a wide range of everyday consumer goods were available and durable consumer goods were mass produced, not only the workers' material demands were greater, but also their needs and consumption assumed a more differentiated pattern.[5] There were people who were fully absorbed in the acquisition of consumer goods, for everyday life. Others were making their investments in family founding, and were bearing the enormous expenses of building or buying some accommodation. They could not even think of buying durables. At the same time, there were also workers who were already busy satisfying their demands for additional durable consumer goods: they already had their TV sets, washing machines, motor cycles, and were now spending their money improving their apartments, buying refrigerators or even automobiles. While some worked for their subsistence, others worked to raise their living standards.

The workers' performance and wage-related behavior besides material-economic circumstances outside the plant can also be influenced by the consciousness-based social environment. More than four-fifths of the plant's workers are rural commuters, former peasants. Their coherence to the village society and its specific value system was very strong: money was a mythical prestige symbol. "His wife will beat him if he takes home less than the neighbor by the end of the month", they said about a worker belonging to a peculiarly closed village community. The following case happened to a worker belonging to that community, to group leader Honner: In 1967, it was still customary that the work groups "transferred percentages" from one month to the other, that is, in cooperation with the foreman, they did not collect the money for all extra piece-rate work performed, but "banked" it. In November 1967, Honner, working precipitately, had one of his fingers cut off by the grinding machine and went on sick pay. In the meantime, however, the factory management let him know that all accumulated percentages now had to be paid out and could not be transferred to the "economic reform" period (from 1968 on). The group followed these instructions. Honner, very upset about this, only

calmed down when he received the money from his fellow-workers in an informal way. But not only workers of rural origin, also those from the town attach great importance to money. Owing to the strongly structured nature of Hungarian society, group interests (including individual interests) were characterized by heterogeneity "from the moment of their birth", hence from the workers' entry into the plant. People's originally differing individual interests further changed in the internal environment of the plant in the crossfire of labor—management and intra-labor conflicts of interests and their relationships to one another also modified it.

Material and spiritual social circumstances within the factory play an important role in shaping the workers' performance and wage-related behavior. The most important of the material- economic factors is the relative level and rising perspective of the worker's earnings. An individual's earnings in the given piece-rate group depended on two factors:

1. the size of the group's jointly produced wage fund (performance percentage),

2. the measure of the individual's personal wage rate (i.e. on his proportionate share of the wage fund).

The worker's perspective of pay rise was determined by the perspective of increase in the above two factors.

The enterprise set the personal wage rates, as we have shown, largely on the basis of criteria independent of individual performance (occupational skill, length of practice). This meant that skilled workers at any rate earned more than semiskilled workers, and the workers of greater seniority made more money than the young ones working only for a shorter period of time, independently of the volume of their actual production. Another aspect of this phenomenon, however, was the fact that the rise in personal wage rates in itself provided no perspective whatsoever for the former, while it promised a rapid improvement of the material position for the latter. Our computations concerning personal wage rates have shown that workers at the same skill level "eat up their future" in 12 to 14 years of practice, (i.e. until they are 30 years of age), at which time they obtain 97.4 percent—practically the maximum—of their wage to be expected (see Chapter 2).

It was a source of a serious conflict between skilled and semiskilled workers, mainly between the "old" (above 30 years of age), and the

young ones, that the former earned a lot, while the latter earned too little. Moreover, the probability of a potential conflict was increased by the fact that the increase in personal wage rates did not present any perspectives for the "old" workers while it did for the young.[6]

Older workers could expect some material advantages and the young ones even more material benefits from the rise in the group's performance and wage-fund level or from the increase in the level of per capita earnings. But the enterprise wished to fix the per capita wage level (owing, primarily, to the constraints of average wage control) and would have liked to manage (without any success, by the way) that it should rise in the long run only between very narrow limits and very slowly.

Although "old" and young workers alike made efforts to increase the performance level, their conflicts did not cease, on the contrary, they even worsened. On the one hand, along with the increasing wage level, the money of the "old", who had higher hourly wage rates from the outset, rose faster than that of the young, and the gap between them widened. The young complained that "the old take away their money without working for it." On the other hand, increasing performance involved the danger of resetting the piece rates. The tightening of the performance requirement hit the "old" much more strongly than the young, because the young were compensated, at least in the long run, by the rise in their personal hourly wage rates, while the "old" were not. Consequently, the young came into much less conflict with the enterprise over the resetting of the piece rates than the old.

The workers' activity was undoubtedly also influenced by the psychological circumstances at the plant. Management could exert an influence on workers' behavior not only by its incentive measures, but also by its methods of appealing to the workers' self-respect (for example by including them in decision-making on certain wage questions, which we shall discuss later) or by having the trade union and party organization stress the enterprise's declared objectives. At the same time, an extremely strong influence was exerted on the workers by the informal organization as a social factor, that was brought about by the performance and wage conflicts between the workers and the enterprise, as well as by conflicts among the workers themselves.

The differentiated nature of workers' social and economic circumstances led to their stratification into groups with different, sometimes opposing interests.

On the basis of the positions taken in the informal organization,

we have divided the sheet-metal workers and assembly fitters into four strata. These are as follows:

1. The leading stratum (the cliques), which was the directing and organizing body that manipulated the performance and wage level.

2. The "attendants" of the guiding stratum (non-clique members), who supported the tactical policy of the cliques.

3. The "periphery", which was those outside the informal structure who assumed a "neutral" position on the question of pursuing a certain policy.

4. The "opposition", which created independent informal structures opposed to the cliques and did not agree with the behavior of the guiding stratum. (For a more detailed discussion, see Chapter 4.)

In order to disclose the interests and interest relations of the individual strata, we examined the socioeconomic backgrounds of their members and found—in consonance with other experiences of ours—that their distinction was primarily due to economic reasons. For an appropriate, reliable assessment of the people's (social) economic positions we used six indices: age, personal hourly wage rate, occupational skill, length of practice, marital status, and housing situation. We selected these indices on the basis of the general interrelations described above and chose the critical points for the individual indices in accordance with the same considerations. Thus, for example, we chose 30 years for the age, which—according to our research findings—meant having reached the upper limit to personal hourly wage rate and the highest earnings category at the plant, the stabilization of the material position of a worker's family, the solution of the housing problem, etc. Along with these six major indices, other indices (consumption structure, etc.) were applied.

For the sheet-metal workers and assembly fitters the major indices of the socioeconomic background of the four strata were as shown in Table 17.

The Interests of the Workers' Leading Stratum

In regard to its economic background, the leading stratum (the dominant cliques of the work groups) was the most homogeneous and most accurately identifiable stratum of the factory unit's staff.

Table 17: Major Indices of the Socioeconomic Background of Sheet-metal Workers and Assembly Fitters

Skill	Number of persons	Average personal hourly wage rate	Above 30 years of age	Skilled worker	Over 10 years of practice	Martial status: married	Owning a housing facility
		forints	%				
Leading stratum	45	9.10	86.6	93.3	71.1	95.5	91.1
Attendants	16	8.37	56.3	87.5	31.2	56.3	62.5
Periphery	41	7.65	31.7	65.5	24.4	48.8	41.4
Opposition	39	7.86	20.5	86.5	10.3	48.7	15.4

Most (86.6 percent) were above 30 years of age (but below 40) and at the peak of their physical power. Most (93.3 percent) were skilled workers with the best occupational experience. They had a stable and secure economic "background". Within the trades and the groups, hence in the plant, it was they who, owing to their high hourly wage rates (9.10 forints on average) earned the most. This was due, besides their high skill level, also to their experience. Their great majority (71.1 percent) had been working at the plant for over 10 years. They had their homes—own houses or apartments—and many had also paid off the greater part of the loans raised for housebuilding. 91.1 percent of them had residences of their own and 95.5 percent were married and had children. Most of their homes were nicely furnished with partly mechanized households. Now they were concentrating their material assets on the acquisition of durable consumer goods and other purposes. They continued to make their homes more comfortable: built and equipped bathrooms (where there were none), added additional rooms, laid parquet on the floors, and (being mostly rural people) had iron railings made. (The latter were a specific "prestige symbol" in the society of the village.) Their children already went to school, so their wives took up employment. The families were able to save significant sums of money each month, which they used for the above-mentioned purposes.

The sheet-metal workers, more exactly, the eight dominant cliques of the Cziffra group, had 13 members. Of those 13 workers, 12 represented

the age group of 30 to 40 years. All except one, were skilled workers. Their high hourly wage rates, also with one exception, ranged from 9.60 to 9.90 forints. With one exception again, their employment at the factory was over 10 years. Eleven of them had their own houses, and two lived as tenants in blocks of flats. All were married and had significant savings (more than 18,000 forints).

The economic position of the workers' leading stratum represented an interest that made it necessary and possible for them to manipulate the performance and wage level.

By the way, the necessity to use tactics was justified by their position both outside and inside the plant. Although these people lived under favorable conditions, their economic needs were also substantial: they needed money to make their homes more comfortable and to buy durable consumers goods. As their personal hourly wages reached the ceiling at the enterprise, they could only hope to get more money from their rising output and from obtaining overtime and target bonuses. The leading stratum had strong particular and joint interests in making use of both of these possibilities. Resorting to the means of raising performance alone was, as already mentioned, very dangerous because this almost automatically led to a tightening of performance requirements, i.e. piece rate cuts. A less dangerous, although not entirely harmless game was coupling the performance regulation with the enforcement of overtime and bonus payments. This also involved the danger or tightening performance requirements, but to a lesser extent than the first variety (see Chapter 3). If the stratum was able to have a firm hold on the action of the trade or of the groups and to push up performance at the right time (when the production line within the enterprise management had dominant interests in fulfilling the plan) and to reduce it at another time (when the wage-tightening interests of the labor line were dominant), then it could enforce its interests.

But the use of tactics by the leading stratum was not only a necessity (in order to extort more money), but also an alternative offering itself. For those people who had a balanced household budget and a significant amount of money saved, it was not a serious problem if their plant earnings declined in the short run if this promised them the perspective of a steep rise in the long run. The cliques of sheet-metal workers easily accepted the 8.20 forint rate per hour in April, because they knew that they would get "their losses returned with interest" in September. (As a result of the tactics used, the hourly wage rate of the trade was 15.40

forints.) Anyway, as the personal hourly wage rate of the cliques was higher, the restriction of output involved relatively smaller sacrifices for them than for those who had lower hourly wage rates.

Thus, the interest of the leading stratum depended, under the given plant conditions, on the use of tactics. The interest of those belonging to the stratum of "attendants" was similar. Their economic position, as shown in Table 17, was close to that of the cliques. Therefore, we shall not start a separate, detailed analysis of their position.

The Interests of the Opposition Stratum

In regard to economic background, the opposition stratum (those belonging to the informal structure of the groups forced into opposition) was almost as marked as the dominant cliques. Its economic position radically differed from that of the other strata.

Most (79.5 percent) were young people of less than 30 years of age. The great majority (86.5 percent) were skilled workers. Thus, with respect to their physical and occupational qualities, they were workers of capabilities just as good as the members of the leading stratum. Their personal wage rates, however, were very low (7.86 forints per hour on average), which was due, primarily, to less experience (only 10.30 percent had a length of practice of over 10 years). That meant that their earnings at the plant were lower than those of the "old-timers". Their economic position was depressed. They were bearing at that time the extremely heavy burdens of family founding and home building (48.7 percent of them were married, but only 15.4 percent had a home of their own). This is perhaps the most important index of their economic position. They were heavily indebted to the National Savings Bank. They were unable to furnish their homes, which were planned in the process of building or, quite infrequently, already built. They were paying installments, and were often unable to buy even basic durables (washing machines, TV sets, etc.). In addition, in families with small children, the wives had to stay at home. They were unable to undertake full-time work. Thus, in the case of these workers under 30 years of age, it was usually their own earnings that constituted the only material basis of family life.

These young people (often called, for lack of understanding, "greedy" by the older workers) could not afford to use tactics. They did not care if labor, compared to their inputs, became, incidentally, more and more "costly". They wanted to make money—and much money. They

wanted to maximize their performance by all means, to have a maximum amount of overtime and target bonuses, and wished that only young people worked in the group and that the older workers with their higher personal wage rates "should not take away the money of the young". This group, with its rigid, screwed-up material demands, had a very confused policy. To be more precise: they had no policy at all. Their behavior was completely contradictory: they wanted to get much overtime and target bonuses, which could only be enforced by tactics. But they did not want to manipulate with tactics nor were they able to afford it. Because if the use of tactics happened to bring about a restriction of output, the earnings of these people would fall more sharply than those of the older workers with their high personal wages rates.

Another item against the use of tactics was that they could not appreciate one of its main aims, the avoidance of tightening performance requirements. They were compensated for the tightening of piece rates by the rapid rise in personal wage rates. "Inputs" did not interest them at all, only "output", economic utility. The principle they professed was: "If they want, they will take away the money anyway. We can't help it. It does not matter. One does it as long as one can. We are trying to work as well as possible. If they tighten the requirements, we shall leave". Because of this attitude the older workers maintained, with justifiable anger from their own point of view, that "it is floater's blood that flows in these people's veins". That was true, but what could they do about it?[7]

The Interests of the Periphery Stratum

Between the leading (plus the attendant) and the opposition strata, which were socially isolated from and even opposed to one another, the factory unit's third stratum, the periphery could be found. Significant in the number of its membership but indistinct and vague in its attitude, the periphery was comprised of people who—at least inside the plant—"did not fall for money".

The periphery was made up, for the most part, of young men with low personal wage rates. This stratum included mostly the semiskilled workers, hence it was rated, with respect to occupational skill, as the lowest ranking people in the factory unit. It was, however, an extremely interesting indicator of that stratum that its members had more homes of their own (62.5 per. cent) than families (56.3 percent). There were a large number of young people among them who regarded their earnings

as "pocket money", as they lived with their parents and were practically supplied by them. There were at the same time also older people among them who were near the retirement age, had grown-up children, lived quietly either with their wives or alone, "taking utmost care of their health". For, owing to their high personal wage rates, their old-age pension appeared to be promising. There were also people, although a relatively small number, whose main source of income was not the plant but rather some private work: fitters who made a fair amount of money by doing plumbing or tin work, young people who "made music" for good money at weddings or on other occasions, and so forth. This stratum displayed relatively little interest in raising the performance and wage level. Their only concern was to have a certain stable money income from the plant. Nor were they appreciably interested in using tactics: they did not want "to keep up a stiff pace of work" nor to drastically limit their expenses even in the interest of avoiding the resetting of rates. Occasionally, however, they were ready to do either if the situation required. Playing tactics was generally indifferent to them just as the intensive drive of the opposition. They disliked doing overtime.[8]

In the smallest unit of work organization, the work group, all three strata were combined. There were, of course, clashes of interest among them. In these conflicts, however, it was not the interests of individuals carrying the characteristics of the various strata that clashed, but the closely or loosely knit individual interests with isolated individual interests. The informal organization (the cliques) was nothing but a system of interest alliance. It united people among whom the conflict over the basic performance and wage issue was resolved by a compromise, and whose interests were integrated. The main function of the informal organization was to enforce the joint, integrated interest of its members against other workers and, primarily, against the enterprise management.

It can be explained, in fact, also by the interests why the strong informal organization, the system of interest alliances, came about exactly among people of over 30 years of age.

1. The basis of the establishment and maintenance of the cliques was the multiple pressure imposed on the individual interests of their members within the plant. These people were strongly opposed to the enterprise management and (owing to their high earnings) also to the lower management and, last but not least, to younger workers. This multiple pressure was the factor responsible for the

fact that the interests of workers belonging to the age group of the clique members came closer to one another, arrived at a compromise and were integrated. This was lacking among younger workers. Their interests—under the existing conditions—were less sharply opposed to the interests of the upper management and even to those of certain lower-level managers.

2. The compromise of interests requires the relative flexibility and homogeneity of individual interests. To use a physical comparison, an electric arc can be established, at a given voltage, only between poles at a certain distance from each other, and cannot if there is no possibility for the poles to be brought closer to each other. Owing to its stable economic background, the older age group was more flexible. The workers were able (and also compelled) to rank their objectives and to renounce the less important objectives for the more important ones. The younger age group, under the pressure of the tight demands dictated by its environment, was not in a position to do the same. Its endeavors, even if roughly homogeneous, were inadaptable due to their overambitious nature. These people were unable to concede the least, to consider their own interests and disregard different views however slight they were.

3. The establishment of joint interests is a long process. It takes time for the workers to acquire the necessary experience about the delicate differences in the operation of the very intricate enterprise to evaluate their knowledge and become aware of their position. Obviously, the time factor was more beneficial to the "old' (having, in general, more than ten years of practice) than to the young.[9]

Of course, other factors were important, too, such as the extent to which workers needed each other's help and had the possibility to communicate, etc. With sheet-metal workers, assembly fitters, and welders these factors were the same, hence it is not necessary to discuss them separately. The case of component fitters, however, was quite specific.

The Special Interests of Component Fitters

Component fitters, owing to their small number in the factory unit and to their simple component-manufacturing work, had a very insignificant role to play. But their attitudes and interests relating to performance are quite interesting in that they made us realize that the

same economic circumstances that, in the case of the assembly fitters and sheet-metal workers, produced strata with relatively homogeneous interests, in combination with other circumstances created completely different interests.

Component fitters in relation to the previously examined indices of workers' socioeconomic background were located at the level of the leading stratum (cliques) of sheet-metal workers and assembly fitters (and their attendants). The indices already examined developed as shown in Table 18.

Table 18: The Indices of the Socioeconomic Background of Component Fitters

Number of personnel	19.00
Average personal hourly wage rate (forints)	8.55
Above 30 years of age	79.90
Skilled worker	84.20
Over 10 years of practice	42.10
Marital status: married	68.40
Owning a housing facility	63.20

To put it briefly, a very high number of component fitters were characterized by a relative flexibility of material demands, by a "stable material background". This was the stratum which, in the case of assembly fitters and sheet-metal workers, brought about the informal organization and pressed for performance tactics. Now the corresponding stratum of the component fitters behaved in an entirely different way as some of its circumstances (which in the trades discussed until now were homogeneous) differed from those of both sheet-metal workers and assembly fitters. While the interests of the "old" members among the sheet-metal and assembly workers were tied to the performance tactics, those of the component fitters were committed to the maximization of performance.

The work of sheet-metal workers and assembly fitters as well as of the welders working with them consisted of tasks requiring, in one way of another, a kind of cooperation. This called, at the same time, for a certain routine and skill. The work of the component fitters, on the other hand, was made up of individual and simple assignments. People

worked individually in one or another corner of the workshop, often in two shifts: hence they were isolated in both space and time. Thus it followed from the nature of their work that no strong informal organization could be created, if only on account of the lack of appropriate communication and of reliance on each other's work, factors constituting the very precondition for applying organized tactics.

At the same time, several consequences arose from the character of work that not only obstructed bur definitely prevented any collective deliberation of the efforts to be made, and even required an uninhibited rise in performance. The simple, primitive nature of the work also had an influence on the wage rate. While the sheet-metal workers and assembly fitters carried out tasks belonging to the job grades IV–VI, the component fitters' tasks were grades II–III.

This meant that at a performance of 100 percent, component fitters earned about 500 forints less than other fitters. These workers, however, although their economic position was stable, insisted on obtaining earnings comparable to those of the sheet-metal workers and the assembly fitters. This meant that they had to attain continually a 125 to 130 percent performance level. This dominant interest was to be confronted with the enterprise interest. The enterprise management, as we have said, ruthlessly scaled down the high percentages that people were determined to reach by rate revisions and other methods.

Owing to the hard work and adverse circumstances in that field, those who did not leave the enterprise worked extremely hard. Manipulations with "staff retention" were out of the question.

Summary

In the final analysis, the main lines of interest conflicts ran between the enterprise management and the workers, on the one hand, and among the individual workers' strata, on the other. The individual trades (work groups) did not exhibit equal opposition to the endeavors of the enterprise management, thus, the component fitters, owing to their peculiar position, were much more adversely affected than the assembly fitters and sheet-metal workers. But the interest differentials were more significant among the workers' strata than among the trades. The interests of the leading stratum were much more opposed to the interests of the enterprise management than those of the opposition stratum or of the periphery. In the latter respect, the confrontation within the trades

(groups) was very pronounced also among the individual strata, with its intensity often surpassing that of the management-labor conflict.

Notes

1. In bourgeois sociology, interest as an abstract category concentrating the effects of the socioeconomic structure and determining human attitudes and behavior is hardly used. (Contrary to the equally abstract category of power, which began to gain ground in the recent past, and to transaction, which is a synthesis of both.) Consequently, as we shall point out in the footnotes of this part of our study, bourgeois sociologists derived workers' types of reaction to incentives and, in this connection, also the establishment of the informal organization directly from certain socioeconomic, structural factors (for example, Seashore, Whyte, Dalton, Collins, etc.)

2. We should note that the interests and goals of the enterprise management did not, and could not fully coincide with the interests and goals declared by the enterprise as such, not even in the case of such a highly dynamic one as discussed here. It does not hold true that organizations and their managements, even if their interest in this direction is duly ensured, should incessantly endeavor to reach maximum rationality and efficiency in their own functioning. Instead, they are trying to establish a "satisfactory state", "a rationally good" and "acceptable" situation. This is also true even if the ambitions and ideologies of certain managers apparently set up maximum standards. (See: J.G. March and H.A. Simon, *Organizations*, (Wiley: New York, 1958.)

3. In all this, and only indirectly affected by interests, a role was also played by the enterprise strategy aimed to ensure that the plants accomplish the bulk of tasks envisaged for the year by November, and use the remaining time for fulfilling certain work backlogs, or for obtaining output in excess of the plan.

4. L. Héthy and Cs. Makó: "A művezetők anyagi érdekeltségének problémái", (Problems of the Material Interest of Foremen). *Ipargazdaság*, November 1969.)

5. By basic consumption we understand a minimum of consumption changing as a function of the economic and cultural level of the

society concerned, which the socialist society has to ensure for all its members. "We can speak of differentiated consumption in societies where the level of output or the form of consumption make it possible—at least for certain classes and strata—to attain a level of consumption exceeding the above minimum, or to satisfy the basic needs differing from the average, the standard level." See: A. Hegedűs and M. Márkus: "Alternatíva és értékválasztás az elosztás és a fogyasztás tervezésében" (Alternative and Value Selection in Planning Distribution and Consumption), *Közgazdasági Szemle*, 1969, No. 9, p. 1055.

6. Such a nature of personal wage rates, which implied the effect of the macro-economic regulator of average wage control and was therefore not an isolated phenomenon, led to extremely negative results, especially in the time-rate areas. This was because in time-rate areas it was almost exclusively the increase in personal wage rates that constituted the material development perspective within the plant. Thus it was the simplest form of output restriction (as against the intricate performance tactics in the factory unit under discussion). Those employees working in the time-rate system who had already attained the maximum of their personal wage rates appeared to be willing to perform only a strictly defined quantity of work that they held to be "justified". This standpoint caused very serious tensions with respect to young workers, who—in the hope of an excepted increase in hourly wage rates—were compelled to fulfill in addition a significant part of the tasks assigned to their older colleagues. A natural reaction on the part of workers who had already reached the "ceiling" of the average wage level was fixing the output level.

7. The interests of the opposition stratum, to use the terminology of industrial sociology, suggested a "rate-buster" behavior, while those of the leading stratum required a "restricter" behavior.

8. While the existence of the periphery stratum and of its typical interests at the enterprise under discussion was a small-scale and insignificant symptom, the situation at other companies was reversed. This difference appeared to be particularly marked in relation to plants operating both in the countryside and in the capital, to units of the engineering and building industry, etc. The main

source of income and the principal material perspective for the workers of the plant discussed was the perspective of rising earnings at the plant. By contrast, we experienced, for example in the building industry, that for bricklayers, carpenters, electricians, and fitters, etc., the work done in off time, in afternoons and on weekends, and usually of an "illegal", private nature was more profitable than the earnings attained at their enterprise. This was especially the case in Budapest. This fact made them, similarly to the periphery described by us, in a sense indifferent to their earnings at their plants, which was equivalent to diminishing the conflicts within the enterprise, while by far not lessening, but rather increasing the problems of labor discipline and labor intensity.

9. Bourgeois sociology, as has already been referred to, accounts for the coming into existence of the informal organization and for the divergent standards of behavior toward economic incentives by certain structural factors directly (hence, under the exclusion of the category of interest). Melville Dalton pointed out the changing impacts of schooling, political affiliation, house and automobile ownership, etc. M. Dalton, "Worker Response and Social Background", *The Journal of Political Economy*, August 1947. Orvin Collins examined the effect to ethnic factors, which, by the way, Dalton was also concerned with (O. Collins: "Ethnic Behavior in Industry: Sponsorship and Rejection in a New England Factory", *American Journal of Sociology*, January 1946) Later on, in his excellent study dealing with rate-busters, Dalton identified the effect of the class variable, too. For his rate-buster types were mostly of middle class and agricultural origin. (see M. Dalton: "The Industrial Rate-Buster: A Characterization", *Applied Anthropology*, Winter 1948.)

   Summing up earlier research findings, William F. Whyte also makes mention of the age of life (in reference to Frank Miller), of sex, etc. (*Men at Work* (Homewood: Irwin-Dorsey, Ill., 1964, Part VIII). According to research, the informal organization is based on the homogeneity of the above factors and on the favorable formation of certain technical factors (Seashore: small group membership, a relatively constant composition; Sayles: cooperative work, etc.).

6 Power Relations in the Enterprise and its Environment

Power in General

In conflicts developing at enterprises on the output and wage issues, a major role is played by interests of divergent or opposing contents and directions. Another principal factor of prominent importance is power.

The content itself of conflicting interests can tell very little about the outcome of the struggle, whether the interests can be reconciled by a compromise, or one of them unambiguously gains the upper hand, thereby attributing to their conflict a chronic character. What we can learn from their content is at most that a compromise between diametrically opposed interests is more difficult to arrive at than between interests with less marked differences. Thus, for example, a reconciliation between the enterprise management and the leading stratum of workers is less easy than between the former and the opposition stratum. This is understandable, as the enterprise policy threatens to deteriorate the cliques, economic position in absolute and relative terms, while in the case of the opposition only an absolute deterioration may occur. Moreover, the workers find it easier to remedy wage restrictions than the unfavorable development of the relationship between labor input and economic results.

In the final analysis, however, a conflict of interests is settled not by their contents but by the quantity of powers behind them.

We use the word power (in contrast to its equivalent in Hungarian common usage) as a technical term similar to *interest*, *informal organization*, *clique*, etc. Hence, we apply it not in a political, but in a much broader, social and economic sense. Power may be defined in a number of ways. According to the most frequently used definition, power is the capability of an individual, group, stratum, etc., to realize its objectives and enforce its own interests for influencing the behavior and actions of other individuals, groups, strata, etc. But the "dynamic" definition of power as given by Crozier is a better reflection of its essence than the above "static" formulation. According to that definition, power is the capability of individuals, groups, or strata to enforce favorable conditions for themselves in a continuous bargaining process between their interests.[1]

Power, like interest, is a product of the socioeconomic environment.

Its differentiated nature is due to the highly structured character of socioeconomic circumstances. Hence, not only the effect, but already the very emergence of power is inseparable from that of interests. In a way, it is a product of interests. A conclusive example for that is the existence of the informal organization not only as an interest alliance but also as a "power formation". As we have seen, the informal organization is made possible and also necessary by the peculiar state of interests and by the specific character of power relations.

The empirical research of power is one of the latest and also most important fields of sociology. Researches in this field may be traced back to the 1950s.[2] The exploration of concrete power within enterprises has been introduced even more recently.

Sociology distinguishes between three varieties of power: utilitarian, normative, and coercive. Utilitarian power influences people's behavior by exerting control over their economic interests and demands. Normative power aims at norms and values governing their behavior. Coercive power is physical compulsion symbolized by such means as whips, iron bars, labor camps, etc. In our study, we shall be concerned primarily and almost exclusively with utilitarian power.

Since the interests within the enterprise under discussion and the conflicts among them are predominantly of an economic nature, the powers behind the interests and participating in the conflicts are also mainly of an economic character.

The Power of the Enterprise Management

The management of an enterprise employing 15,000 people and with a movable and immovable property of a very great value has, at least in certain respects, an enormous amount of power at its disposal. At the extremely dynamic engineering enterprise discussed this has imposing manifestations year by year, month by month: the enterprise management, which has brought about with enormous investments, and the necessary contributions of higher authorities, the country's most up-to-date diesel engine manufacturing plant, decided gradually to abandon the manufacture of passenger railway carriages and to switch over to the production of goods wagons.

From the point of view of our present subject, however, there is one single aspect of power that is of interest to us, namely the question of what power the enterprise has over the wages paid to workers for their work and through it over their daily performance. Apparently, the

enterprise's power is very great in that field. The monthly wages paid to the manual staff can be expressed in millions. As has been pointed out above, the production line and the labor line jointly influence all those factors which determine the earnings of the factory units' workers, such as the types of coaches to be manufactured, rate levels for the individual coach types, job grades, personal wage rates, target bonuses, quantity of overtime, and so on. All this substantial power is not quite equitably divided between the production and labor lines. The former is stronger, simply because the primary objective of the enterprise is production rather than keeping the wage level. This is true, although this statement is a little oversimplified. In fact, the greater power of the production line (and with it that of the workers) made itself felt in the fact that the factory unit transgressed the wage level allowed for the labor line each year. Moreover, the the production targets had been attained, the plan had been fulfilled, and the production line had left the scene. It was only then that the factory unit's personnel department materialized its very desperate wage restriction measures contradicting the rules of an efficient incentive policy. This always happened at the beginning of the year.

The continuous tug-of-war between the production line and the labor line in the wage issue suggests that the power of the enterprise management in this field is by far not as unchallenged as it may seem at first glance. This also appears to be confirmed by the phenomenon that the personnel department, against all rational considerations related to a well-founded decision-making, stripped the members of the higher and the lower management of several powers. (For more details see the methods of implementing rate revisions and of setting personal wage rates described in Chapter 2.) In strange contradiction to the great power that the enterprise management wielded in other fields, it was almost completely powerless in the wage issue. The enterprise management had considerable freedom in questions concerning technical development, the expansion of fixed assets, etc., but was extremely restricted in questions of wage rates. This grotesque phenomenon means, according to some economic leaders, that the forint value of the wage fund differs from the forint value, for example, of the development fund, with the value of the former being extremely high.

There is, obviously, no enterprise in the world in which the wage level can move freely. Reynolds calls the two extreme points of the movement of the wage level "maximum shutdown point" and "minimum

shutdown point", respectively.[3] The former point indicates the level that no company can transgress without becoming insolvent. Below the level indicated by the second point, however, no company can recruit any labor. At the enterprise discussed here, owing to other macro-economic external factors, the maximum shutdown point came very close, or even below, the minimum shutdown point.

The enterprise management (labor line) was unable to bear any significant rise (higher than 2.5 percent) in the per capita wage level on an enterprise-wide scale, simply because this would have made it "insolvent". The rise allowed by the average-wage control was only about 2 percent. Any further per capita wage level increase had to be covered from the profit sharing fund against a very high tax payment. By 1968, the enterprise could pay its workers a profit share corresponding to 10 days' earnings. Assuming, by approximate calculations, 300 working days a year, and taking into account an appreciable tax being imposed on the profit-sharing fund in the case of a wage rise, this means that the enterprise would have been able to cover only a ridiculously small wage rise from the available profit-sharing fund.

In addition, given a low per capita wage level, the enterprise could not attract any labor. Workers, often the best ones, left the enterprise in large numbers to take jobs in other plants in the town—machine-tool and house-building factories, as well as in the better-paying cooperative plants of the vicinity . The enterprise was unable to retain these people; they left as they were generally offered a 5 to 10 percent and often even considerably higher wage rise.

The situation was, no doubt, extremely strange. One of the country's largest enterprises, working (in its modern plants) with a high productivity, was simply unable to compete, with respect to the wage level, with smaller enterprises or cooperative establishments in which the productivity level was much lower. And for the very reason that the system of average-wage control was not general, or was not sufficiently differentiated, it did not affect the cooperative establishments and provided roughly the same wage level for state-owned enterprises, independently of their output. At the same time, smaller enterprises were in a position to create, by various manipulations (fictitious employment of low-income workers, etc.), a more favorable position for themselves than big enterprises.

What made the situation still stranger was the fact that the enterprise, at least in the factory unit under examination was suffering from

a labor shortage not because is had not enough workers, but because it could not pay its best workers.

(By listing these arguments we do not wish to make questionable the justification of average-wage control. We are fully aware that the regulation of a per capita wage level—under the present conditions of the economy—is closely connected with maintaining the equilibrium of economic development while ensuring the relative balance between commodity supply and demand in the consumer market and between labor supply and demand in the labor market. It is also obvious that a more differentiated determination of the per capita average-wage level by enterprise is an extremely difficult task for central regulation, which—as can be seen from the phenomena experienced at the enterprise—is absolutely necessary in the framework of the reforms already launched.)

Thus, the enterprise had less than the necessary power at its disposal with respect to the per capita wage level, had insignificant influence on the workers' economic position and, consequently, on their behavior, even if it tried to use its available instruments with a relative flexibility and experimenting with all possible alternatives.

The Power of the Lower Management

The power of foremen was, at least seemingly, very limited. We were told in the office of the factory unit management: "They could give money to their men and at the same time withdraw it from them", and "An average foreman has very limited means at his disposal". "We are working with materials worth several millions, but have no say in settling the case of a wage differential worth 200 forints", complained the supervisor of the component fitters. And indeed a foreman's opinion was taken into account rather rarely. His intervention was possible in assigning target bonuses—if there were any—and in awarding the title of excellent worker. This was apparently all.

At the same time, the enterprise management also regarded foremen as persons without power (which was best reflected in their position in economic stimulation) . This was based on the view that in modern enterprises—in the conditions of medium- and large-batch manufacturing on complicated machines and machine systems—"skill" guidance, technological improvements, and the solution of organizational problems are the tasks of functional departments specialized in these affairs. That may be true, but the manufacture of wagons, thus the production of the casings of railway coaches, was an "individual" kind of production

using primitive technology. Under these circumstances, the functional departments were less able to survey the organizational, or even the technological problems of production than the foreman . Hence the foreman—irrespective of the immense enterprise size and of the large number of its specialized departments—remained invariably the "master" of the workshop. And this meant, given the workers' piece-rate incentive system, that the foreman was able–even if to a lesser extent directly—to let his men have "money" indirectly. He did this in such a way that under his technical and organizational agreement, by manipulating the implementation of enterprise decisions on wage and piece rates and by other means, he increased the performance level of the trade and of the work groups.

In our present study we do not wish to give a detailed analysis of the "tricks" used by foremen, we only quote a few examples. In his work the foreman ("if he was a master of his skill") was in a position to promote workers' interests, and without heavily violating technological regulations and quality requirements, improved the possibilities of raising their performance. Often it was up to the foreman whether the material arrived right at the beginning of work, or—owing to the neglect of those in charge—three hours later. If the foreman made conscious efforts to select people of good occupational skill and capable of cooperation, if he took care to assign the appropriate task to the appropriate men, if he tried to "specialize" his subordinates in the multifarious work, he created thereby the conditions for improving the production achievements of the group and the trade.

The foreman could require and get additional labor for the improvement of the earnings of his efficient skilled subordinates (the average wage rate made itself felt also within the trade and the group), but he could also reduce his personnel. In carrying out piece-rate revisions, independently of the extremely centralized character of this measure and of the very detailed implementation specifications by the personnel department, the foreman was able to encroach on people's interests. For example, assemblers were engaged in tasks of the job grades III, IV, and V. A standard working hour of job grade VI was paid more than that of job grade III. The personnel department determined for each trade (on the basis of performance percentages) the measure of piece-rate cuts to be the implemented. If the foreman took this "time" away from job grade VI and not from grade III, then the workers' wage loss was considerably greater than if he had done it the other way round. At the

same time, the foreman also had certain "additional wage funds" at his disposal (money earmarked for changing patterns, for maintenance, etc.) by which he could complement workers' earnings. Hence, the foreman had significant power—although it changed with work processes and was not always "legal"—yet it was power by which he could exert influence on the workers' performance and wage level.

The foremen's power was also increased by their degree of information. (The foremen of the factory unit had known about the April 1969 rate revision several months before.) Partly their information, partly the scope of material instruments available to them were increased if they fulfilled such functions as the post of the secretary of the plant trade union committee. Similarly, party membership and functions also added to their power.

That the foremen's relatively great "power" remained nothing but potential was due, primarily, to the neglect of their economic stimulation, which also was a reason why a significant member of foremen were "at a very low level" in their occupation. Thus, for example, while the foreman of frontal-part assemblers was held to be a first-class expert in his trade, the other eight foremen were people of medium or even lower qualification who did not make use of their possibilities of manipulation.

The Trade Union

In this chapter we shall not analyze separately the power phenomena stemming from the party's economic control function. On the one hand, in conflicts at the shop level (e.g. in the case of piece-rate setting), the enterprise party organization, in contrast to the trade unions, did not participate. On the other, owing to the insufficiency of our research possibilities, we did not possess an adequate quantity of conclusive material about the enterprise party organization's activity.

Those who accept the idea that a conflict or interests may develop between the management and the workers within the enterprise, generally assume that power is a double-centered phenomenon. The enterprise management, including the upper and the lover management, protects its own interests by relying on its specific powers while the trade union, also on the basis of its own powers, protects the interests of the workers.[4] This is in principle true, for Hungary, too. The structure of the enterprise, which included automatically the trade union (and the party organization), is suitable to establish the desired balance of powers between the individual interests.

Within the framework set by the laws of the socialist state, the trade unions have always played an active part in preventing the interests of the management primarily in efficiency from gaining predominance in the enterprise activity and have tried to ensure that it adequately served the direct interests of workers. The collective contract of the enterprise discussed ensures a great many (nonwage) economic benefits for the working masses (a 44-hour working week, paid leave, aids, cultural and sports facilities, holidays, a workers' hostel, workers' transport, catering, etc.). More recently, mainly in the period following the introduction of the economic reform of 1968, the trade union increasingly voiced its opinion also in the representation of the workers' everyday interests. For example, shortly after the conclusion of our research, the enterprise under discussion, on the initiative of the trade union, introduced the minimum monthly wage limit of 1,200 forints for manual workers. The trade union has, by law, the right of intervention at all levels of enterprise management in questions concerning the rights of its employees.

Although the merits of the trade union undoubtedly have to be acknowledged, it appears at the same time that the union was not able to impose its will in the questions most sensitively affecting workers, those of performance and wage rates. The trade union had the formal right, but not the power to do so: the balance between the management and the trade union was lopsided in favor of the former. It was a consequence of this that, contrary to the ideal the division of worker within the enterprise was not bicentered but multicentered.

To avoid any misunderstanding, we want to emphasize that the enterprise trade union did its utmost to cope with its tasks in a field that was extremely difficult for it. A convincing example was the case of the two piece-rate cuts carried out in early 1969 (in January and April). This is how foremen of the factory unit gave account of the events in full consonance with the factory records:

> The measures taken parallel to the introduction of reduced working time were preceded by lengthy debates between enterprise managers and the Enterprise Trade Union Committee (ETUC). The enterprise, contrary to the ETUC, was not satisfied with the tightening approved by the ETUC in 1 January, claiming that the rates were still too loose. Obviously the management gave in, under the condition that if the rates should nevertheless prove to be loose, that is, if

> the output were to exceed 108 percent, another cut would be made. And on that point, an agreement was reached. As the output rose in the first two months of the year, on April 1 the enterprise managers again tightened the piece rates according to their original intention.

The period between the two rate settings was not free from displeasing events. An assembly fitter told us:

> The management knows that rate settings do not mean anything to the worker: he does his work as long as he can, because he needs a fixed sum money for his household expenses and is determined to get it. To this end, he jumps over necessary phases of work to push up his quota. In January and February, the management still tolerated this, then the rates were cut again, but also quality requirements were made stricter.

A foreman said: "After the first rate setting in January, the factory unit was faced with such overstrained targets what the workers had to do their outmost. I was fully aware of the forthcoming new tightening, but the majority of foremen did not envisage that." Or they simply did not want to. According to the report of workers, a senior foreman took every effort to force his subordinates to reach a higher output. An ETUC-member worker (a component fitter) mentioned in his report, among other things, the following:

> The percentages reached by the machine operators (in January and February) were made up not of running orders but of work passed on by cooperating plants, and the tightening was carried out on the basis of local orders. Therefore, the rates set for the machines are sometimes even below the number of strokes.

The union functionary quoted above wrote the following on output:

> Workers of the factory unit accented the new rate cuts with great indignation. The two-month [January–February] average [hourly earning] of assembly fitters was 11.83 forints. After the cut it fell to 10.60 forints, constituting a fall of 1.23 forints per hour. For component fitters the original

two-month average was 12.06 forints, reaching 9.91 forints after the cut, which corresponds to a decrease of 2.15 forints per hour. The two-month average of rust-cleaners was 10.81 forints before and 8.36 forints after the cut, which means an hourly loss of 2.45 forints. Earnings proportions in the lower job grades are inadequate: skilled and semiskilled workers in the job grades II and III earn less than unskilled workers.

All this was not and could not be known to the ETUC. For the trade union, by its organizational structure and independently of the good intentions of the upper management, was unable to survey the complicated relations established in the factory unit for want of an appropriate apparatus. This does not mean that it did not have any local organization: the factory unit, just as all the other units, had its Plant Trade Union Committee, and each work group elected a shop steward. But the PTUC secretarial post (a position of vital importance) was held by a foreman, the president was a senior foreman, and, besides three administrative employees, there were only two (!) workers on the committee. (The above-quoted notes on the second piece-rate cut were a contribution prepared by a PTUC member for the delegates' meeting of the trade union election that was never submitted to higher levels.)

For similar reasons, the workers could not expect the party organization to protect their interests. Although about half the party organization was made up of workers, the leadership consisted exclusively of members of the lower management. The secretary was a foreman, the deputy secretary was a senior foreman, and the other three members were also foremen. The party committee of the enterprise could simply not be informed objectively about the state of affairs.[5]

It appears that there are certain contradictions in the role and, in connection with it, in the structure of the trade union.

As regards their depth, these contradictions go beyond the deficient operation of the channels of information. The trade union, even if it had had a clear picture of the events in the factory unit or of the behavior and position of its own "organized" workers, would not have known that position to take in the performance and wage conflict. The traditional tasks of the trade union included to organize work competitions, while it also tried to oppose the tightening of piece rates. Hence, on the one hand, it urged the raising of output and, on the other, made efforts to avert its consequences. The trade union united in its ranks the

enterprise's workers, administrative employees, and middle and higher managers, many of whom were also performing serious functions for the union. This necessarily led to confusion in its interest protection activities. Whose interests should it defend in the case of a conflict? Should it defend the interests of the workers, the shop floor managers, or of the higher management? Besides, the trade union should play the role of an intermediary and promote the creation of harmony within the organization. But performing such a function (even if we theoretically accept its possibility) requires an independent apparatus and the appropriate power.

The trade union, as we have proved, did not have any independent apparatus. "The trouble is that trade union functionaries are also paid by the company", said the workers. The leadership of the PTUC consisted of shop floor managers, who were primarily foremen, senior foremen and not trade union functionaries. And, as we have already pointed out when analyzing the various interests, members of the lower-level management have interests that are bound to differ from those of the workers and are therefore unsuitable to represent the workers' interests. People, even if they are honest and of good intentions, cannot "get out of their skins", hence they act in a way determined by their socioeconomic positions. The leadership of the enterprise trade union organization each year submitted the list of its functionaries to the enterprise management according to the personnel department, "so that it should materially recompense their social activities within legal possibilities", which it did indeed. It is by no means accidental that some foremen (also in the factory unit discussed) used their trade union functions as a stepping stone toward higher administrative positions (e.g. in the production management). Similarly, higher trade union functionaries, although in principle independent, obtained their profit shares under the provisions of collective bargaining in the same way as the members of the higher enterprise management.

The power of the trade union, as a consequence of its dependence and despite its right of intervention in enterprise decisions, was smaller than the power of the enterprise management. In addition, even if the trade union had been able to make its apparatus independent, it could not have claimed greater power for itself. In the case of rate revisions, because the wages in the piece-rate areas had disproportionately outdistanced those in the time-rate areas, the normal action expected of the trade union by its members would have been to make the enterprise in-

crease the earnings of time-rate workers while leaving those of piece-rate workers unchanged. But the enterprise management did not resort to rate cuts of its own accord: it was compelled by the requirements of profitability, labor shortage and, above all, by average wages. And just as the enterprise management could not ignore national policy measures and regulators, the enterprise trade union could not do so either. As long as certain centralized decisions deprived the enterprise management of the necessary power, the trade union could not expect the little power of the enterprise, hardly sufficient to resolve the conflicts and at the same time to meet the requirements of economic efficiency, to be shared with it.

All this made bad blood among the labor force. These are just two typical statements. "At our company the trade union functions only nominally. It is reduced to zero." "The enterprise and the trade union are tarred with the same brush."[6]

The Power of the Labor Force

The deficiencies of the trade union's functioning did not mean that the workers were "defenseless" against the enterprise management.

If we consider the workers' general position (which can by no means be confined to their intraenterprise position), it can be said that the workers' power positions were strong enough to compete with the enterprise management. As a result of the measures of economic reform aired at facilitating changing jobs and, primarily, as a consequence of average-wage control, the labor market demand (which was more fictitious than real) outstripped the supply to such an extent that workers—be they unskilled or skilled welders or fitters—could always permit to give notice without thereby sustaining any material loss. This in itself ensured the workers a very strong position.

The workers' power position, together with the great demand for labor,was also strengthened by other factors within the enterprise. The most important was the informal organization. It is needless to prove the extraordinary power focus of such an organization. It provides comprehensive and reliable information about all instances of the environment affecting the workers' interests and collectively processes this information by collating it with a significant quantity of empirical material. Moreover, it elaborates the flexible methods of interest protection best corresponding to the given circumstances and collectively performs that action. At the same time, such qualities as outstanding professional

knowledge, working ability, skill experience, etc.[7] may also underline the workers' power position.

The power of workers was of course not equally shared among the individual trades, work groups, and the various strata within them.

The power of the leading stratum, the cliques, was extremely great, partly because the informal structure was the most stable, ensuring absolute cooperation among its members, and partly because this stratum united in its ranks the best skilled workers with the longest job practice and the highest skill level. Concerning the informal collective leadership of the "six" sheet-metal workers, the following was said in the factory unit: "If these six men choose to start, everybody will follow them. But if these six stop, everybody will stop." The foreman said about the cliques and their attendants: "These twenty men, however much they quarrel among themselves, are always in agreement seen from outside. They know what they have to do and why, are extremely intelligent and very good also at their skill." It should be added that this referred almost exclusively to skilled workers and to men with over 10 years of practice. These men's position was also strengthened by the fact that they had a strong "economic background". They could easily bear any material sacrifices of performance slowdowns or any transitory wage losses. In addition to their "informal" power positions, they also held all "formal" power positions accessible to workers. Among sheet-metal workers, but also among assembly-fitters, all group leaders, trade union functionaries, party members, militiamen, etc., were almost exclusively clique members. In addition, they constituted the nucleus team.

Owing to the character of their informal organization, the power of the leading stratum of the sheet-metal workers was greater than that of the assembly fitters. As has already been pointed out, the sheet-metal workers were dominated by one single, very strong informal center (consisting of eight interconnected cliques).

In the case of the cliques of sheet-metal workers, still other specific means of power were added: they were in a monopoly position, which was due to several factors. "Levelling of sheets is a type of job in which the worker produces as much as he wants to. Each sheet is different", said a foreman. (And that was true, indeed. According to workers it was because of the sheets' changing inner stratification, carbon content, etc.) The knack of the skill was unknown even to foremen. Once the foremen just wanted to demonstrate how the work could be done faster. But, not knowing the knack of the job, they ended up with ever greater

bumps and dents on the sheet, which gave the workers an opportunity to "amuse themselves" for weeks. By contrast, the job of assembly workers and welders could be rated more reliably.

The difficulty to replace them was an important part of the monopoly position of the sheet-metal workers. "Their secret is that sheet-metal workers are hard to be found. If someone among the welders speaks too much or does not work overtime, he is replaced. Replacement among sheet-metal workers is out of the question. A newcomer can bear the noise in the 'music conservatory' for two days at the most. Everybody is afraid of the ear-splitting noise." And they took great care to preserve their being irreplaceable. "Newcomers are being cast off and they are not explained the knack of the job", their foreman complained. That was true insofar as only reliable young people were introduced into the secrets of the job, but it was far from being true that all young people were cast off. Among the attendants of the levelling cliques there were also young people of twenty.

The sheet-metal workers' significance was further increased by the fact that they performed the last phase of work in the unit. "The world's eyes are on the sheet-metal workers", one of them claimed. "It is up to us whether the coach leaves the unit or not." If the group, more exactly the cliques, slowed down, not only the incentive bonus of the unit management was threatened, sooner or later also a bottleneck developed in the production. "Workers in the levelling shop are the only group that can turn railway coach manufacturing upside down. There is a backlog and workers still put down the hammer at two o'clock. What can I do?" their foreman declared.[8]

The assembly fitters had other factors of power, but of a lesser effect than those of the sheet-metal workers. The cliques of frontal-part assembly fitters (the Trencsényi group) enjoyed the support of the foreman, who was regarded as the best expert of the unit, and they themselves were excellent skilled workers. Similarly, the position or the cliques of interior assembly fitters (the Engel, Honner, and Lázár groups) was strengthened by their maintaining very good relations with the unit's most cleverly "manipulating" foreman, who made the best possible use of the power available to him and—not accidentally—was also the secretary of the PTUC.

The power of another well-definable stratum, the opposition, was poor compared to that of the cliques of the leading stratum. Although very good skilled workers, their experience (primarily in the operation

of the intricate enterprise organization rather than in work) was rather poor, nor did they have any adequate economic background. They also found it difficult to cooperate with one another. Their "informal" and "formal" power positions equally proved to be poor: in most cases, they were able to create only a chain-like informal structure, and there were very few among them who held any "formal" positions. As a the consequence of weakness of informal positions, the lack of any appropriate "economic background", they were unable to exploit any serious power positions. Thus, for example, the monopoly position enjoyed by the sheet-metal workers was, at least in part, also open to the Ferenczi group belonging to the "opposition". But the young workers were unable to make the same use of it as the "old" workers. Their principal means of power, their "trump", was leaving the company as the last resort, which, though an important factor from the point of view of their general "power" position, strengthened their enterprise position only to a lesser extent.

The "periphery" of sheet-metal and assembly fitters was, from the aspect of power, completely insignificant.

Component fitters, owing to their specific position, were in a weak position, similar to the "opposition" of the sheet-metal and assembly fitters.

Summary

The necessary degree of balance between the enterprise management and the labor force was, more or less, given: not because any significant power positions were available to the workers, but rather because the management had little power and its competence in the basic wage issue was limited. The power of the labor force did not lie in the trade union but in the informal organization. Consequently, the balance of power between the enterprise management and the workers existed where the informal organization was strong and stable. This was the case with sheet-metal and assembly fitters, but not at all with component fitters. At the same time, the power balance—in connection with the inadequate functioning of the trade union—was completely upset between the individual workers' strata within the various trades (groups). The leading stratum (plus attendants) was in a position to dictate the conditions to the other strata (opposition and periphery). Hence, power relations were characterized by a multicentered pattern and a state of either partial balance or the lack of balance.[9]

Notes

1. The power of "A" over "B" means the ability of "A" to make "B" do things which it would not have done without the intervention of "A" (R. Dahl, 1957). "The exercise of symmetrical and irreversible effects in a given moment" (F. Perou, 1958). "A"'s power over "B" means the ability of "A" by means of which "A" can achieve in negotiations with "B" transactions (exchanges) that are advantageous (favorable) to him" (M. Crozier, 1964).

2. The empirical research of power began in the United States in the 1950s with the exploration of the power structures of settlements, and its findings have been debated up to our days. The most important studies have been undertaken by Floyd Hunter, Lawrence J.R. Herson, Robert A. Dahl, Peter H. Rossy, Arnold Rose, this field was introduced into organizational sociology only from the late 1950s onward. The most important works relevant to the subject are M. Dalton, *Men who Manage* (New York: Wiley, 1959); M. Crozier, *Organisation et Pouvoir* (Publication of Groupe de Sociologie des Organisations (C.N.R.S.)) and A. Tourain, *La société post-industrielle. Naissance d'une Société* (Paris: Edition Dennoel, 1969).

3. L.G. Reynolds, *Labor Economics and Labor Relations* (New York: Prentice Hall, 1949).

4. "Although the socialist state guarantees, laws and collective bargaining ensure the rights of workers, experiences of our party show that this *in itself* is not sufficient. The laws, provisions and agreements determining the labor force's working and living conditions are also carried out by men, and therefore, infringements of rights, *clashes of interests* are *occasionally* possible. Even under socialist relations it is necessary that the trade unions defend the rights of workers' collectives and individuals, and represent their daily interests." Quoted from the report of the Central Committee submitted to the 10th Congress of the Hungarian Socialist Workers' Party.

5. In 1970, a radical change took place in a sounder direction than before: worker party members of the factory unit elected their own representative (a member of the leading stratum, to use a term of

our sociology) to occupy the important position of the secretary of the organization.

6. It was this development of power relations between the enterprise management and the trade union that marked the functioning of shop-floor democracy as well as of the production meeting. If the workers could not have an indirect say in the wage-level issue (through the trade union), then they could not state their views directly either (at the production meeting organized by the trade union). The fact that the production meeting is nothing but formal is closely connected with the power constellation within the enterprise. (As for the production meeting Chapter 2 of our study.)

7. The informal power structure exists not only at the shop-floor level, but it also comprises the management of the factory unit as well as the enterprise management. Our research revealed that two informal cliques were in opposition to each other. The first was grouped around the unit manager and the PTUC, the second around the unit's party leadership.

8. Leonard Sayles describes an interesting case of American workers enjoying a monopoly position similar to that of the sheet-metal workers. The case, although it took place under different technological and socioeconomic conditions, makes it possible to better understand the levellers' behavior and also gives a certain indication of the means that the management will sooner or later apply to liquidate the workers' use of tactics, which, however imposing and sympathetic in itself, appears to be inconvenient to the enterprise. Sayles examined the activity of 35 workers of the precision grinding workshop of a smaller engineering factory (employing 1,200 men) between 1941 and 1951.

   In 1941, the precision grinders received the highest wage rates set for the finishing phase of products, all in the same job grade and for the same money. In the first years of the World War II they enforced overtime and the corresponding extra payment by a 24-hour strike. They were allowed to speed up their ,machines, to reach top outputs and top wage rates, and thought "they ruled the world". They could do so because they performed a very important phase of work: their workshop was in the geographical center of the company and in the focus of its communication network. The men

in the workshop acted in complete solidarity so that they carried on their affairs alone; the foremen hardly appeared in the shop. The president of the trade union and two members of the executive body were elected from among them. When war orders ceased to be placed, the company management made efforts to cut the grinders' wages. The workers compelled the management by a three-month slowdown to restore their earlier material positions. Moreover, with the help of the trade union they forced new sums of money out of the company. *After 1946*, however, the company management succeeded in carrying out a 30 percent wage cut. Despite repeated efforts, because a conflict had broken out in the precision-grinding workshop, it was impossible to start a strike or even to carry out an output restriction. In the meantime radical changes took place in the position of the workshop: the management modified the production in such a way that grinding—except for some special work phases—became superfluous, whereby the quantity of the work to be done decreased, and a significant number of the workers were transferred into the night shift. The grinding workshop was moved from the center of the factory, and its relations with other parts of the factory broke off. The trade union president, also a precision grinder, was entrusted with other tasks, and relations with his earlier fellow workers discontinued. L. Sayles, *A Case Study on Participation and Technological Change* quoted in W.F. Whyte, *Men at Work* (Homewood: Irwin-Dorsey, Ill., 1964).

9. In socialist work organization, as proved in this part of our study, the power model does not correspond to the pluralistic picture drawn by domestic sociologists and political scientists. Nor do those Western allegations hold true that the power structure of socialist enterprise is "necessarily" monolithic. The real situation is that the formal (prescriptive) and the connected informal (hidden) power structures alike display both pluralistic and monolithic features. At the enterprise level, the higher management and the trade union may often appear to be monolithic also from the viewpoint of workers. In conflicts over the wage level it is really monolithic characteristics that prevail, but in other fields (measures of workers' welfare policy) this is not the case. Here pluralistic features are predominant. As regards the trade union, it is unable to act in certain questions as a power counterpoise, and it cannot afford

to do so even at the workshop level, insofar as it cannot defend certain workers' strata against others. Hence, what is really decisive is not the monolithic or pluralistic balance of power (often complementing each other), but the multilateral power balance.

7 Transactions at the Enterprise, Performance Tactics and Labor Turnover

Transactions in general

The struggle and conflicts of interest supported by means of power of differing strengths may result either in the emergence or in the frustration of transactions. Transactions, or the lack of them, may reflect both a given state of interest and power relations and a given state of the socioeconomic environment determining the course of the interest and power game.

We speak of transactions at the enterprise when the parties participating in its activity attain, as a result of informal, negotiated, or nonnegotiated bargaining, utilities (economic advantages and noneconomic benefits) that are roughly proportionate to the burdens they bear (efforts, inputs). Transactions, however, are lacking if one party, or several parties, enjoy great advantages that are not in proportion to their burdens, while the other party, or several parties, bear disproportional great burdens compared to the advantages enjoyed. For the enterprise to function successfully, and for its formal mechanisms and institutions to be filled with the appropriate content, a well-balanced system of bi- and multilateral transactions has to be created, because this alone can ensure that the parties participating in the organizational activity cooperate smoothly and in the interest of a common goal. And since the operation of the organization is a process extended in time, it is not sufficient for the transactions to exist only momentarily; rather, their long-term existence is desirable.

Transactions, looked at from the viewpoint of interests and power, are of a synthetic nature. They arise from a peculiar state of interest and power relations, but the presence of interests and power alone does not necessarily produce a transaction. Consequently the lack of transactions is indicative of the presence of a chronic conflict of interests or of a lasting disequilibrium of the power balance. The stability of transactions is the expression of the stability of a compromise between interests and powers.

In the present part of our study, we are analyzing workers' behavior within the enterprise, the interrelations between the higher management and the labor force, between the lower management and the workers, as well as among individual workers' strata from the point of view of transactions (their existence and stability), summarizing thereby practically

all that we have expounded about the subject in analyzing concrete cases of worker's behavior, interest, and power relations. By introducing the comprehensive category of transaction we shall also clarify several new aspects of the complexity of the topic.

At the enterprise under discussion, the subject matter of transactions was money (economic benefit) and work (input). This was due to the fact that in the people's demand structure the requirements of an economic character were predominant, or that these were the needs that could be satisfied. All this did not exclude the possibility for noneconomic "values", like prestige, participation in social life, or personal sympathy, to be involved in the transaction, but their significance was, from the point of view of our subject, only "secondary". Thus, most of the transactions to be discussed will be of an economic character.[1]

Transactions and the Control Mechanism

Since the transactions were of an economic nature, they were "governed" in the first place by the enterprise's formal control mechanism, more precisely by its most important element, the economic incentive system. The control mechanism, from the point of view of transactions, was designed to ensure, by urging the comprehensive realization of distribution by results, the accomplishment of agreements among strata, groups, and individuals. In the enterprise the advantages (economic benefits) and the efforts (labor input) are distributed with mutual and many-sided proportionality. That is, the result of the game of interests and powers is positive and tends toward the realization of organizational objectives.

Since at the enterprise under study a strictly governed and tightly organized formal structure was in operation, the transactions were concluded, in general, within the limits of rules set up by the enterprise organization, although these transactions with their wide range and rich variety far exceeded formal limitations. With the forms of manifestation of economic benefit (money) and input (work) occurring in such an immense multitude and variety, the regulation of all possible variants or transactions by the control mechanism and their codification in the framework of a collective contract or other documents are simply impossible. Transactions are concluded not only yearly, but monthly, weekly, hourly, and each minute so that no regulation or rule-making activity can keep track of them. Although the main rules in concluding transac-

tions have been laid down in a host of official documents, the doors to "improvisation" and evasion have always been left open.

The usual course of transactions was this: the worker entered the factory gate, took the hammer, spent his eight hours in the workshop, and got a specified sum of money for it. But it was also a transaction if the production department—induced by a reduction of output—set an incentive bonus for the workers of the factory unit. Seemingly it was as simple as the workers producing coaches and receiving money for it, but reality was much more intricate. A whole series of transactions lay behind this "simple" one, with the following actors involved: the production line, the personnel line, the lower management of the factory unit, the individual trades, the work groups, the various workers' strata, and so on. This series of transactions included all the interests and powers that we have described. We had to do with a many-sided transaction, if a sheet-metal worker of exceptional capability adjusted his requirement to the standard prescribed by the informal structure (the cliques), not to his expected money demand or ability, and enjoyed—in exchange—all advantages of the use of tactics. If workers, at the foreman's request, remained in the workshop to finish the coach for quality control without overtime, this was a tactical transaction. In this case, either the foreman "discounted" the "bill" that the workers issued to him for a service he had done them in the past, or the workers "provided a credit" to their foreman as an advance for a future favor expected of him. It was also a kind of transaction if a crane operator working on time-rate, thus being indifferent to output, allowed himself to be rushed to make it possible for assembly fitters working in a piece-rate system to make their money, knowing about the serious consequences if he did not.

The transactions described have the common feature of opposing interests and powers (with easily or less easily recognizable sources of conflict in them). They also share the characteristic that their participants enter into contracts in general, in categories laid down in formal rules. The amount of money paid to workers for their performance (input) is determined by personal wage rates, piece rates, and job grades. The compensation for the assembly fitters' services (or use of tactics) stems from the "legal" sources of determining target bonuses and overtime. The foreman manipulates his men's earnings by using "legal" resources. These are important circumstances as they indicate that the formal structure at the enterprise under discussion was very strong. (Here, too, as everywhere else, the transactions also had their "illegal" meth-

ods. In the factory unit, the concept of the so-called "black overtime" was not unknown, which meant that doing overtime was not included in any official records, and the enterprise management paid overtime work "out of its pocket.")

It is perhaps worth noting that in a significant part of Hungarian enterprises, primarily in the building industry, transactions far outgrow the formal framework. At a house-building enterprise where we also conducted research, such formal categories of the piece-rate system as personal wage rate, job grade, or work standard lost their significance for the most part. Before taking his hammer the new worker asks how much money he will get. The answer of "as much as you perform" makes him laugh immoderately and say that a wage multiplier of one and a half (150 percent performance) will do for him. Although the work group's performance hardly exceeds 100 percent, the foreman is compelled to certify, under the pretext of fictitious work (shuffling of rubble, transport work, or, in the workers' slang, "singing national songs"), the percentage that is acceptable to the worker. If he does not, it will be done by the building manager or the personnel department of the enterprise. There is a labor shortage, and many workers must be hired. The fact that there is no real performance behind the money, under the prevailing circumstances, troubles few people.

The majority of transactions in our enterprise was concluded, as we have mentioned, within formal frameworks. However, the problem was that the construction and functioning of the control mechanism proved largely unsuitable (see Chapter 2 of our study) to reach its declared aim—distribution by results—which also had a bearing on the transactions. Within a distorted framework, no transaction system encompassing the enterprise as a whole could come into existence. Thus, as a result of the game of interests and powers, transactions could be concluded only in certain relations, while in others one-sided burden-bearing, and one-sided advantages were predominant. But even the transactions concluded proved not stable enough in the long run.

Transactions Between the Enterprise Management and the Labor Force

As the interests and powers of several strata and groups came into conflict in the matter of work (input) and money (economic benefit), constituting the subjects of transactions, transactions between the enterprise management and the labor force were, essentially, inseparable

parts of the whole system. Very often, transactions were concluded between the management and labor, while in other cases it was rather their absence that was typical. Similarly, part of the transactions concluded were marked by stability, others by instability. Transactions between the management and labor were quite differentiated. Transactions—looked at superficially—were differentiated by trades and work groups. Viewed in depth, the differentiation took place according to workers' strata. On the basis of the situation in 1968–69 it can be stated that between sheet-metal workers and the enterprise management transactions were concluded that, although of an unstable character, proved workable in the long run. Sheet-metal workers did their tasks ("if they wanted to") in the most diligent manner. Their top output exceeded 150 percent in 1968 (a performance that could only be recorded among component fitters), and they were always ready to do overtime (about 36 hours each per month). In exchange, they enjoyed many privileges: they worked in job grade VI, their wage rates were progressive, and they were given the largest amount of incentive bonuses and overtime (the latter can perhaps be counted as a privilege). If we examine the situation of sheet-metal workers by work groups, the Cziffra group of "old" sheet-metal workers performed and received the most, while the "young" Ferenczi group received the least. (It is perhaps worth calling attention to the fact that it was the sheet-metal workers who occupied the strongest, almost "bullet-proof" power position vis-á-vis the enterprise.) Transactions between the management and sheet-metal workers were made unstable by the fact that the enterprise management (the personnel line) regularly disregarded the earlier well-functioning transactions by its wage-tightening measures and tried to impose conditions on workers that were less favorable than the earlier ones (more work for the same money, or the same work for less money). This explains why in early 1967 and 1969 repeated, sharp conflicts took place between the management and the sheet-metal workers.

Similarly, transactions between the-enterprise management and assembly fitters were also unstable. The frontal-part assembly fitters (the Trencsényi group) and interior assembly fitters (the Engel, Honner, and Lázár groups) produced an output comparable to that of the sheet-metal workers, while this was not the case with side-part and roof fitters (the Jancsek, Neumann, and Péteri groups), or the body assemblers. The quantity of their overtime was also far below that of the above (about 20 overtime hours each per month). Moreover, benefits were more lim-

ited: they worked in job grades IV and V, with fewer incentive bonuses, less overtime, and without any special privileges. In their case, the enterprise by piece-rate revisions succeeded in turning the input/economic benefit ratio to its own advantage, by concluding transactions year by year on terms more favorable to it. It appears, however, that the assembly fitters did not sustain any appreciable losses by that. Among the frontal-part and inside assemblers, the foremen compensated their men for the losses caused by piece-rate cuts through various manipulations, while the relatively low performance level of the third group of assembly fitters (side-part, roof-assemblers, and body assemblers) enabled them to avoid performance tightening, that is, piece-rate cuts.

Transactions between component fitters and the enterprise management were practically nonexistent. These men worked hard (in 1968, their top output exceeded 160 percent). Their bonuses were insignificant: they performed tasks of job grades II and III, target bonuses were practically unknown to them, and the quantity of overtime was very small (about 14 hours each per month). The "bloody" tightening of the performance requirement in 1969 turned the input-output ratio very favorable for the enterprise management and unbearably unfavorable for workers. Nobody compensated the workers for their losses. In all this an undeniably serious role was played by the trade with its insignificant means of power, rendering it almost completely defenseless against the management.

Privileges of the Leading Stratum: Staff Keeping

Looking at the question in more depth, we can state that the transactions concluded between the enterprise management, on the one hand, and sheet-metal and assembly fitters, on the other, extended, in fact, only over the leading stratum of the two trades.

The leading stratum, mainly among the sheet-metal workers, had a higher share in special benefits than any other stratum: in target bonuses, bonuses from the manager's fund, and in the possibilities of doing overtime. All this is clearly reflected in the data relating to sheet-metal workers (the Cziffra and Ferenczi groups, 1968). (See Table 19.)

At the same time, the leading stratum was also in a privileged position with respect to its base earnings. Table 20 shows how with the sheet-metal workers and assembly fitters the average hourly earnings in the individual work groups, and of the individual workers' strata within

Table 19: Variable Wage Components in Individual Workers' Strata (1968)

Workers' strata	Per capita target bonus	Per capita bonus from manager's fund	Per capita overtime
	forints		
Cliques	2,414.0	231.0	430.8
Attendants	1,822.0	–	288.4
Opposition	1,284.0	31.0	333.4
Periphery	367.3	–	123.8

them, in 1968 deviated from the average hourly earnings of the two trades as a whole.

The leading stratum, irrespective of whether the work group's hourly earnings were high or low related to the average, invariably earned more (with one exception) than the average of the trade. This was also true of such relatively poorly earning work groups as the Jancsek, Neumann, or Péteri assembly fitters' groups. The opposition and the periphery strata, on the other hand, earned less in each group (with the exception of a few peculiar cases) than the trade average. This was also the case in such well-earning groups as the Cziffra sheet-metal and the Engel, Honner, and Trencsényi fitters' groups.

All this makes it possible for us to draw the conclusion that the transactions between the enterprise management and the leading stratum (which, owing to enterprise measures, were unstable, although reproducing themselves), were not advantageous to other workers' strata; moreover, the cliques could even arrive at agreements with the enterprise that were to the disadvantage of other workers.

When examining the hourly earnings of the leading stratum, we come across a surprising phenomenon: the clique members of the Cziffra group, who, owing to their high earnings, meant a thorn in the flesh of the whole factory unit's management and also of the enterprise management, in their regular working time reached lower hourly earnings (13.85 forints) than the cliques of the Engel and Honner assembly fitters' groups (13.94 and 14.23 forints, respectively). In order to eliminate the distortion caused by the performance levels, we have transformed the hourly

Table 20: Work Group Earnings of Sheet-metal Workers and Assembly Fitters

Work group (trade)	Number of numbers	Deviations from the 1968 average hourly earnings (11.59 forints) of sheet-metal and assembly fitters			
		of the workgroup's	of the cliques'	of the opposition's	of the periphery's
		hourly earnings			
Cziffra (sheet-metal workers)	27	+1.37	+2.26	–	−0.29
Ferenczi (sheet-metal workers)	27	−0.44	–	+0.26	−0.36
Oláh (sheet-metal workers)	5	+0.51	+0.86	–	–
Engel (interior assembly fitters)	9	+0.33	+2.35	−0.05	–
Honner (interior assembly fitters)	6	+0.92	+2.64	−0.85	–
Lázár (interior assembly fitters)	9	−0.33	−0.31	–	+0.73
Jancsek (roof fitters)	19	−1.39	+0.23	−1.70	−1.85
Neumann (side-part fitters)	15	−1.26	+0.31	–	−1.37
Péteri (body assemblies)	10	−0.51	+1.31	−0.51	+0.30
Trencsényi (frontal part fitters)	14	−0.38	+0.92	−3.71	−1.36

earnings of each work group into a 100 percent performance level (see Table 21).

As can be seen from Table 21, at a 100 percent (group) performance the cliques of the Engel, Honner, Jancsek, and Péteri groups could attain the same earnings as the "envied" cliques of the Cziffra group. And they could do so despite the fact that the Cziffra group enjoyed quite a few privileges (progression, high job grades, incentive bonuses) that were also reflected in their hourly earnings.

How did the Engel, Honner, Jancsek, and Péteri cliques nevertheless manage to rise to the privileged level of the sheet-metal workers?

Table 21: Earnings Related to a 100 Percent Performance

Work groups (trades)	Number of members	Performance percentage	Hourly earnings of cliques	Hourly earnings attained at a 100 percent performance
			forints	
Cziffra (sheet-metal workers)	27	129.8	13.85	10.64
Ferenczi (sheet-metal workers)	27	110.6	–	–
Oláh (sheet-metal workers)	5	129.6	12.45	9.61
Engel (assembly fitters)	9	131.1	13.94	10.63
Honner (assembly fitters)	6	134.8	14.23	10.55
Lázár (assembly fitters)	9	123.5	11.28	9.13
Jancsek (assembly fitters)	19	110.9	11.82	10.66
Neumann (assembly fitters)	15	111.4	10.90	9.75
Péteri (assembly fitters)	10	118.5	12.90	10.89
Trencsényi (assembly fitters)	14	119.8	12.51	10.44

The answer is simple: by keeping the number of staff high (by imitating the tactics that the enterprise management applied to be able to pay its workers within the limits of the average wage). The cliques, consisting of "old" workers with high personal wage rates, kept many young workers in the group, thereby "improving" their hourly earnings. While in the Cziffra group the majority of workers were clique members with high personal rates (74 percent) (together with attendants), this ratio in the Engel group was only 44.4, in the Honner group 50, in the Jancsek group 26, and only 10 percent in the Péteri group. The remainder were young workers. (We wish to note that until the output

reduction in April 1968 the work group of sheet-metal workers had also applied "manpower keeping", but then the young workers left the team and created their own separate group, the Ferenczi group, while the old ones remained in the Cziffra group.)

Manpower keeping was, compared to the performance tactics, an alternative or complementary means available to workers to ensure themselves a material advantage under enterprise conditions. (We refer to the discussions devoted to workers' interests in Chapter 5 of our study.) The material development perspectives of the stratum came to an end when its personal wage rates stopped rising or the enterprise tried to fix the group's per capita average wage level. Performance tactics brought about a breakthrough in the average wage level, thereby ensuring some perspective, while staff keeping did so by manipulations within the framework of the average wage level. Hence, if the number of the young with their low personal wage rates grew within the group in relation to the "old" with their high personal wage rates, this led—assuming the same per capita wage level—to a growth of the earnings of both the old and the young. (For a detailed interpretation, see Chapter 2.)

The advantage gained by the manpower keeping policy of the leading stratum constituted part of the transactions concluded with the enterprise, in the same way as overtime, incentive bonuses, and other material benefits. But manpower keeping affected the relations between the individual workers' strata much more appreciably than the allocation of overtime and incentive bonuses. The relationship between the rest of the workers, strata (opposition, periphery) and the enterprise was seriously affected by it. The transaction between the leading stratum and the enterprise, as a result of the fact that in a certain sense the other strata ensured the cliques' material advantages proportionate to their burden-bearing, hardly permitted the establishment of transactions, depending on the given state of interest and power relations.

Transactions Among Individual Workers' Strata

The character of transactions concluded among workers' strata within the work group changed, as a matter of fact, according to the proportion to which the three strata of opposing interests—the leading cliques (plus attendants), the opposition, and the periphery—were represented. A set of questions emerged: What was the number of men in the leading stratum occupying strong power positions, of people who had firm but flexible demands and whose interest was tied to performance tactics?

What was the proportion of the opposition, which made increased but inadaptable demands, urged an absolute maximization of output, and whose power position was weaker? To what extent was the powerless periphery stratum, which did not "fall for money" and did not wish to "press" for its acquisition, represented?

In the final analysis, transactions among workers' strata within the group fell into three varieties:

1. In four groups the leading stratum and its attendants were in the absolute majority (Cziffra 74, Oláh-80, Lázár 78, and Trencsényi 71 percent). The remainder—as is also clearly revealed by our sociometric figures—was the periphery. There was no appreciable "opposition". There was no obstacle to prevent the development of transactions. The periphery had no objection to the performance tactics used by the cliques. In the period of upswing, it indoubtedly derived advantages from the rise in output, although these were only minor, owing to the periphery's low personal wage rates. But the occasional reduction of output did not disturb the periphery either because it had a firm economic "background". The cliques followed the basic principle that "everybody in the work team has to perform the task assigned to him". This meant that in a "rush period" those with high personal wage rates had to work harder, while the periphery with its low personal wage rates was working more loosely. A peculiar, "reversed performance principle" prevailed: as much work as money. The role of the periphery was the "improvement" of the cliques' earnings with the performance and per capita wage level remaining unchanged, because the enterprise made efforts, under the pressure of average wage control, to fix a per capita wage level within the trades and the groups. As the earnings of the cliques with their high personal wage rates at an unchanged per capita wage level were higher if men with low hourly wages worked in the group, the presence of the periphery was of advantage to the cliques, without being exploited by them: it was a clear transaction. The periphery earned as much as it worked. The main distinction of the cliques, we wish to emphasize again, was the performance tactics. Their activity was adjusted to the enterprise, in the same way as the group's output was always to correspond to enterprise policy changes in the best possible way: their performance increased or decreased accordingly. The cliques

therefore took care to prevent the "dilution" of the work group. This explains why the leading stratum was represented in their composition established over the years by 70 to 80 percent. Hence, "staff keeping" was not characteristic of these groups.

2. In two groups the periphery stratum gained the majority (in the Neumann group, the periphery comprised 53 percent while the cliques and attendants comprised 47 percent; in the Jancsek group, the periphery comprised 57, while the cliques and attendants comprised 26 percent and the opposition 17 percent). Given such a high dilution and the large-scale presence of a periphery indifferent to raising performance and the wage level, any definite performance tactics were unimaginable. The performance of the work groups was substantially lower than that of the previous four groups, and its fluctuation could only cautiously follow that of the latter's output. This satisfied both the periphery and the cliques, for the low performance level made it possible for them to avoid more serious piece-rate tightening. (The two piece-rate cuts in 1969 required these two groups—except for sheet-metal workers—to make the least sacrifices.) At the same time, the large-scale presence of the periphery with its low personal wage rates favorably influenced the earnings of the cliques with their high personal hourly wage rates: they were, despite the low per capita wage level, rather high. The periphery did not work more than corresponded to its earnings: the transaction existed, although the cliques of the Neumann and Jancsek groups did not earn nearly as much as those of the Cziffra, Oláh, or Trencsényi groups. The only loser of the transactions established in the Neumann and Jancsek groups was the small "opposition" in the latter group. Owing to their low personal wage rates, the earnings of its members were hopelessly low, and it appeared to be impossible for them to adapt their earnings by raising the performance level.

3. Typical of the composition of the three work groups was the majority of the opposition stratum (Engel: 55, Honner: 50, and Péteri: 80 percent), practically lacking any periphery. The leading stratum, despite its strong power positions, decided to take a somewhat defensive position. In the question of performance tactics there existed radical controversies. The leading stratum wanted to use tactics, and in this respect it could partly rely on the opposition.

Young people with their highly raised material demands wanted, and were able, to work extremely hard, that is, the groups could draw very good advantages from the "upswing" periods. On the other hand, the "opposition" also continued to press on when the danger of a piece-rate cut was imminent (as in October–November 1968 and in January–February 1969), which brought forth a strict tightening of piece rates. This deeply affected the interests of the leading stratum (although the foreman compensated the Engel and Honner cliques by means of certain manipulations). Later, accepting the circumstances, the cliques themselves passed over to an unrestricted production drive and, given the high performance percentage and the large number of the opposition with its low personal wage rates, their earnings rose extremely high. The earnings of the "old" workers of the Honner group, without special income sources (overtime, etc.), surpassed the earnings of the young by 700 forints per month on average, those of the Engel group by about 500 forints. In the "peek period"—when the output level was the highest—the difference reached, sometimes even exceeded, 1,000 forints per month. Similar earnings relationships developed in the Péteri group. This ratio, however, was no longer fair; it was explicitly disadvantageous to one party. Not because the wage differentials were high (which is even desirable!), but because they did not reflect performance differences. The young often worked harder and better than the old who were "inclined to use tactics". Hence, there were unjustifiably great economic advantages on the one side, and disproportionately great burdens on the other. The relationship between the two strata was extremely tense. Under such circumstances, the principal aim of these work groups (leading strata) was no longer performance tactics, but staff keeping and their endeavor was not against the interests of the enterprise but of the young workers.

The situation was the same among sheet-metal workers until the separation of the Cziffra and the Ferenczi groups in the spring of 1968. Then the opposition broke away from the leading stratum and established the Ferenczi group as an independent team. In this, the opposition had a 70 percent majority against the periphery, making preparations itself for a kind of "staff keeping". The problems did not disappear because the "opposition's" unrestricted production drive was less acceptable for the

periphery stratum than the tactics of the cliques. The lack of transactions and the conflicts themselves were perpetuated.

Transactions Between the Lower Management and Labor

In analyzing the transactions between the enterprise management and labor as well as among the various workers' strata we applied some typology. This was made possible by the fact that the enterprise management, at least in the matter of performance and wage level, represented relatively homogeneous interests and a roughly uniform power center. Thus, we had at our disposal a pattern of appropriate size (160 men, 3 trades, 13 work groups) for typifying labor according to interests and powers by trades, work groups and workers' strata. A distinction of transaction types with respect to the lower management would be an irresponsible undertaking as the interest and power positions of foremen, senior foremen and plant managers are at least as heterogeneous as those of workers, though they are by far not represented in an appropriate number to provide a basis for risking a typology. Therefore, we are describing here just a few individual cases, pointing out some interesting relationships.

The relations between the guiding cliques and the foremen of the sheet-metal fitters—especially of the Cziffra work group—were extremely tense (see also Chapter 4). The foremen had a strong dislike of the performance tactics used because as a result of these tactics the earnings of the best workers regularly and considerably surpassed their own. Since the occasional output restrictions of sheet-metal workers gave rise to a plant-wide, or often even an enterprise-wide indignation, the intervention of the factory-unit manager and even of the enterprise production and personnel departments became necessary. All this made the foremen appear to the enterprise management as "helpless and useless" employees. Even the workers' judgment was similar:

- The foreman cannot produce as much as a first-class skilled worker. Only one of them was a skilled sheet-metal worker, but very poor even in his skill. The other is a bronze caster, the third a technician of the wood-working industry.
- One goes up to one of them, asks something, and he just scratches his head and goes away.
- Neither the quality of work, nor organization interest them. Welders often draw the coaches in a crescent-shaped form, and there are

also faults in the roof-arches. The men [sheet-metal fitters] repair them, although this is not their job and get no money for it. These faults ought to be corrected profoundly, but they never think of it. Only money matters.

- They are telling lies. Promise a lot and give little. They say, "A worker should not argue. He should go and do his work". The foreman only cares for his own schedule, only his own bonus counts, not the worker's forint. "Have you found your money insufficient? You ought to have worked more", the foremen say. But I also have my own schedule, not only they.

The intolerably bad relationship finds expression in the foremen's everyday behavior:

- They always drive us on, but it has no sense, we are working on piece rate.
- He always looks at his watch. He urges us on even if we are waiting for quality control and it is no use hammering the sheet.
- My foreman is always at my heels. I go to drink some water or go to the lavatory, he always shouts at me, "Why aren't you working?" The foremen only collects the cards and watches men, which is absolutely unnecessary.
- We would get along also without foremen.

Thus we cannot speak of real transactions between foremen and workers in the sheet-metal trade.

The two best foremen of the factory unit supervised the assembly fitters, directing the work of interior fitters (Engel, Honner and Lázár groups) and of frontal-part fitters (Trencsényi group). The transactions between them and the workers had a long history. Both were good skilled workers and highly appreciated by the management for their good performance. They earned the most among all foremen.

The foreman of the interior assemblers had made a special career. He had become a trade union secretary a short time before we began our research, and not long after we had concluded it, he was promoted to the post of a plant manager. Trade union work took much of his time: all he required was his men to work well even if left alone, to perform their tasks and not to cause any "problems" to him. All this was not in

contradiction to the fact that he tolerated and approved a cautious use of tactics by his groups (for example, when they cautiously joined the output restriction of the sheet-metal workers in April 1968). His workers said the following about him:

- He gained the sympathy of people by getting money for them. His men always did as he told them.
- He has serious privileges. As a union secretary he is informed about everything, has a say in all matters. In matters of rewards and other questions his word weights more than that of all the other foremen.
- He always reckons, calculates, and knows that it is always possible to take an evasive action when a difficult situation arises. He manipulates with the number of personnel, knows when it is good to have many or few members in his work groups. When piece ratios were reset, he knew well how to make cuts so as to cause the least possible injury to workers.
- He takes care that the diary of the socialist brigade is kept appropriately to ensure that his men also have a share in the reward paid for that. He is a cunning peasant, a middleman type.

The foreman explicitly built upon the cliques of his groups, and maintained less good relations with the "opposition". He has good relations with men of his age group [30 to 40 year old people] and treats the young as his subordinates. He is tolerant toward group leaders [Engel, Honner], but indifferent to the problems of the young. As regards his promises made to them, he is often "forgetful". When reminded of these promises, he talks beside the point, and changes the subject. "He says, he is a union secretary and has to defend the interests of the 'union' members, while in fact he protects simply his own and his 'selected' men's interests."

The foreman of the frontal-part assemblers is "the best man of the trade, he knows how to have the work done, and he himself can do it, too." The only thing that mattered to him during his career within the unit was his own work, and the work done by his men. He was perhaps the only foreman who fulfilled no function in any social organization (he did not belong to any party). In his team (Trencsényi group) with relatively few members (14 men) , the workers esteemed and liked him

very much. In the course of several years he selected the members of his group out of the best skilled workers. The manager of the factory unit said about him, "I can assign urgent, extraordinary tasks requiring high occupational skill only to him, the others would spend a week on them." Therefore, the special well-paying tasks were always given to his work team. In such cases he worked together with his men. These work tasks were profitable both to the foreman and to his men alike. "He fights for the money of his men, always knows about the performance percentage and the money due to the group. The mistake he makes is at most one or two percent." He was helpful in the group's cautious performance tactics, and it never occurred that after the enterprise's wage restricting measures he could not find compensation for his men. The members of his group submitted several technical suggestions (not of an innovative nature) that made their work much easier.

There was no transaction between the third foreman of the assembly fitters and his work teams (Jancsek, Neumann, and Péteri groups). The foreman was the most poorly paid official of the factory unit's lower management, and the wage tensions between him and his workers were, besides the sheet-metal workers, perhaps the greatest.

He is an embittered man. Walks silently, with his hands at his back, among the coaches, and when he begins to speak, all he can say is "Let's go, let's go." He has a fixed monthly salary and does not care if I take home 1,000 forints less. At worst, he guffaws at me. It also occurred that people had to go home as there was no material. If we don't tell him, he does not order any materials. Skilled workers often have to go to the component workshop themselves to fight for materials, though this is not included in their rates. He does not organize our work either, lets everything go as it does.

Similarly bad was the relationship between the component fitters and their foreman.

- He is not interested in money, only in work. He is a fairly good man in his trade, but has no idea about the performance percentage of his men.

- When piece-rate cuts were announced (in April 1969), there was a great uproar among the workers. It was hardly half past one, but everybody went to wash himself and dress. He just stood amazed and looked, but did not dare to say a word. Yet, when after the piece-rate cut he might have helped us with additional wage tickets

to raise our earnings, he "forgot" them is his drawer.

Transactions and Workers' Behavior, Performance Tactics and Labor Turnover

The state of the interest and power relations of the enterprise management, the lower management, the labor force or the individual workers' strata (determined by their socioeconomic environment) did not provide, in the final analysis, a suitable foundation on which a multilateral transaction system encompassing the enterprise as a whole could be established. Transactions came into existence only in areas where, as a result of the interaction of circumstances (first, owing to a relative power equilibrium of the interested parties; second, in the absence of any conflict of interests), there was a possibility of bringing about a compromise, or sometimes an integration of interests. Transactions did not prove to be stable in the long run even in such cases: they broke off within a short period, with new ones appearing instead. At the same time, transactions were completely lacking in several areas.
Where did transactions take place?

1. In the management-labor relationship they took place between the management and the leading strata of the two larger trades, the sheet-metal workers and the assembly fitters. This social grouping realized the tactics of performance regulation in its defensive and offensive varieties and pursued the practice of "staff keeping" in certain work groups. The interests between these two parties were, under the given circumstances, rather sharply opposed to each other, but the leading strata of the two trades had sufficient power, through their formal and mainly informal positions, to enforce favorable conditions for themselves in the negotiations with the enterprise. Thus a compromise of interests or transactions could be established, at least transitorily. The main weakness of transactions (exactly because of the basically sharp conflict of interests) was their instability. The enterprise management, under the pressure of its own interests, repeatedly disregarded the transactions concluded earlier with its workers, trying to enforce a new one with more favorable conditions for itself. The workers, however, steadily resorted to counteractions to restore the earlier transaction, or to conclude a new one favorable to them.

2. As regards intralabor transactions, they took place between the leading stratum and the periphery (between the Cziffra, Oláh, Lázár, Trencsényi, Jancsek, and Neumann sheet-metal and assembly fitters' groups). The transactions were based on the fact that the interests of the two strata (owing to the rather indifferent attitude of the periphery toward incentives) were not that sharply opposed; their differences—even in the case of a complete absence of power equilibrium—were easy to eliminate.

3. Transactions also took place between the leading stratum and two foremen.

Where did no transactions take place?

1. In the management-labor relationship no transaction was concluded with the opposition stratum of the sheet-metal and assembly fitters, a workers' grouping urging performance maximization. The relationship of interests between this stratum and the management took a favorable course: there was by far not such a conflict as in the case of the leading stratum. But the power positions of the opposition were weak. This frustrated, indirectly, the development of a transaction with the enterprise, for the enterprise management was compelled to come to an agreement with the leading stratum occupying a stronger position, and—under the pressure of the prevailing circumstances—at the expense of the opposition stratum. The conditions that the leading stratum gained for itself in the course of its transactions were injurious to the young workers, although the enterprise management was often not aware of this. The enterprise tacitly approved, for example, the practice of "staff keeping" in certain groups by assenting, by means of its ranking system, to the "exploitation" of the young.[2]

2. No transaction took place within the sheet-metal and assembly fitters' trades, for the aforementioned reasons, between the leading stratum and the opposition.

3. No transaction was concluded between the enterprise management and the performance-maximizing component fitters. The lack of transaction was due here to the sharply opposing basic interests and to the complete absence of power equilibrium.

4. No transaction took place between the workers and most foremen.

The facts outlined above clearly show that in the case of opposing interests the conclusion of transactions is possible only if an appropriate power equilibrium, an appropriate distribution of power, is ensured. At the same time, the existence and absence of transactions, as follows from the above summary, make it possible to approach certain types of workers' behavior in a new, more comprehensive way than before.[3]

Performance regulation as used in the enterprise (slow-down, sit-down, speed-up) and performance maximization are equally aimed at ensuring that the interested work groups or workers can conclude a transaction (an agreement with the enterprise) that is mutually advantageous, in which they enjoy economic benefits proportionate to their burdens in such a way that increased burden-bearing means enjoying increased advantages. Performance regulation is, by its very nature, a group type of behavior. At the same time, performance maximization, even if characteristic of certain workers' strata, trades, and work groups, is basically an individual type of behavior. The former requires cooperation among people, the latter does not. Performance regulation is a type of action of workers' collectives occupying power positions that—exactly owing to the equilibrium of the power position—reaches its aim, i.e. transaction. In turn, performance maximization is a type of behavior of individual workers who have, in general, little or no power. Because of the very lack of power equilibrium, the type cannot reach its aim: cannot result in a transaction. This is understandable as in the former case the crucial point is that workers "are not ready to pay" before the outcome of bargaining, while in the latter case the workers "pay for everything in advance" even before the beginning of bargaining without any promise of recompense.

The question of exits and labor turnover has hardly been mentioned so far. We have devoted our attention almost exclusively to performance tactics. We have done so because in the discussion of workers' behavior the attitude toward performance enjoys, from a logical point of view, definite priority to leaving a job, since performance tactics are as a surface reflection of the movement of interest and power relations in people's actions. Labor turnover, however, is already a consequence of the final outcome of the interest and power game, a result of the transaction.

The labor turnover in the factory unit examined was closely interconnected with the content and character of the transactions concluded, and its differentiation was adjusted to the differentiation of transactions. This meant that the inclination to give notice was typical mostly of work-

ers who could not establish a transaction with their fellow workers and the enterprise. They were bearing disproportionate heavy burdens while enjoying disproportionate low economic benefits. On the other hand, a role was also played by the perspectives and possible terms of transactions to be concluded with a new enterprise. Depending on whether they appeared to be more favorable—and here the workers obviously considered several, primarily economic viewpoints—the workers decided to leave.[4]

The motives of labor turnover have to be sought above all in the content and character of economic transactions between the worker and the enterprise and (in the case of a group-wage system) between the worker and his fellow-workers. This was convincingly proved by our research.

The indices of labor turnover, broken down by trades and work groups (for the period between January 1, 1968 and June 30, 1969), are shown in Table 22.

Table 22: Indices of Labor Turnover by Trades and Work Groups

Trade (work group)	Number of workers	Number of leavers	Number of skilled workers leaving with over 10 years of practice	Leavers as a percentage of work force
Sheet-metal workers	59	27	4	46
Cziffra–Ferenczi	54	27	4	50
Oláh	5	–	–	–
Assembly fitters	82	28	1	34
Engel	9	7	–	77
Honner	6	5	–	83
Lázár	9	3	–	33
Jancsek	19	4	1	21
Neumann	15	2	–	13
Péteri	10	6	–	60
Trencsényi	14	1	–	7
Component fitters	19	9	7	47
Antal	7	3	3	43
Benkő	5	3	2	60
Rónai	7	3	2	43

The turnover rate by trades was roughly the same for each of them: 46 percent for sheet-metal workers and 47 percent for component fitters. Looking more deeply into things we find that this similarity completely disappears. Out of the 55 sheet-metal workers and assembly fitters who left their workplace, only skilled workers had more than 10 years of job practice, that is, belonged to the large leading stratum or to its attendants. The great majority of the remaining 50 men belonged to the "opposition", as is clearly demonstrated by the fact that the highest turnover rate could be experienced in the Cziffra–Ferenczi group of sheet-metal workers (undivided until the spring of 1968) and in the Engel, Honner, and Péteri assembly fitters' groups. These were the collectives where no interstrata transaction was recorded. The turnover rate was low, however, in the Oláh, Lázár, Jancsek, and Neumann groups, where transactions could be found among the workers' strata. Hence, the labor turnover in the sheet-metal and assembly fitters' groups was elicited primarily by the lack of inter-strata transactions.

More skilled component fitters with over 10 years of job practice left the enterprise than the number of the sheet-metal and assembly fitters combined. This was the result of the repeatedly experienced failure or lack of transactions between the enterprise management and the trade.

The scope of our examination does not allow us to draw general conclusions as to the nation-wide labor turnover, but we should like to note that the explorations concerning this topic (which were generally carried out by the enterprises themselves, including one or two sociologists or psychologists) were, in the majority of cases, of very little relevance. As also shown by our analysis, labor turnover is the product of the intricate interaction of a great many material, economic, and consciousness-based social factors acting within the factory. Therefore, the exact disclosure of its reasons requires a complex analysis of the internal life of enterprises and plants. By narrowing down the research merely to "interviewing" the leavers, we shall obtain superficial, practically useless results (such as the percentage of workers who left the enterprise because they wanted to get more money, the percentage who left because they were not satisfied with their foremen, with working conditions, etc.).

Notes

1. The main theoretical approaches to transaction (exchange theories) stem from the following sociologists: G.G. Homans, *Social Behavior: Its Elementary Forms* (New York: Harcourt, 1961) (primarily

a psychological theory); P. Blau *Exchange and Power in Social Life* (New York: Wiley, 1964) and M. Crozier *Le phénomene bureaucratique* (Paris: Aux Éditions du Seuil, 1963). In our study we borrowed some ideas above all from Michel Crozier, though we treated and built these ideas rather liberally into our scheme.

2. "The internal conflict of the group cannot be beneficial to the management even in the time of a labor-management conflict." (W.F. Whyte, *Men at Work* [Homewood: Irwin-Dorsey, Ill., 1964])

3. We do not regard the performance regulation described by us as fully identical with the category of output restriction, although cyclical slowdowns do contain an element of "restriction". In analyzing the phenomenon of the restriction of output, sociology generally disregards a comprehensive investigation of interest and power relations or transactions, thereby narrowing down the explanation of the phenomenon to a few factors. The most frequent interpretations are the following:

   (a) The restriction of output is examined in the narrow field of trades. They regard as its basic motive the danger of losing occupational privileges, which may arise at the introduction of any new production procedures (H. Behrend). Examples illustrating this phenomenon were also provided by the engineering enterprise examined by us. The welders of a plant unit producing spherical containers were ready to change over from manual work to the use of an automatic machine only if their privileges—primarily their favorable material position—were further guaranteed to them. The use of the machine, although greatly facilitating their tasks, made their high manual skill useless thereby putting an end to their "monopoly position". (See Chapter 1.)

   (b) The restriction of output is held to be a means of strengthening social relations (E. Mayo, J. Dickson). This is because the weighing up of efforts presupposes the collective evaluation of plant information. The collective elaboration and observance of the role of joint actions promotes a kind of social life within the work group. Its basic motive is the demand for belonging to the group, to the community (the need for a social experience). This motive of performance regulation can also

be observed, although not dominant, in the cohesive groups examined by us.

(c) Restriction of output is deduced from the demand to exercise control over the social and economic conditions of productive work (D. Roy, T. Lupton, M. Dalton, W.F. Whyte). By their behavior, workers want to prevent the enterprise management from imposing on them burdens accruing to the management from the implementation of certain enterprise objectives (increase of efficiency, reduction of prime costs. This was one of the most important motives of performance regulation in the groups examined by us. In Eastern Europe Polish scientists did the most intensive research into the question of workers' attitudes toward performance. Especially noteworthy is the activity of Kazimierz Dóktor. He demonstrated the phenomenon of performance regulation by examining the electricity consumption curve of a working day in the case of machine work.

According to his research findings, there also exists, along with the "official" working time, a real working time differing from the former. The starting of work, the beginning and end of work breaks, the conclusion of work depend on the workers' own social rules, habits, and traditions. These factors shape the so-called social model of the working day. Similarly, such social models are also established for weeks, months, and longer periods. (The industrial organizers of the Hungarian engineering enterprise discussed by us have also measured electricity consumption in certain machine work areas and have experienced similar results.) According to Dóktor, the practice of work groups determines by their own "meta-rates" the habitual and exemplary level of output, which is a result of worker solidarity, becomes compulsory for all groups working on piece rates. And meta-rate deviates from the piece rate as set by the enterprise. Unfortunately, however, Dóktor himself does not analyze those enterprise and macro-economic circumstances that, through transmissions of interest and power relations, necessarily give rise to the meta-rates. K. Dóktor, "Le conformisme des travailleurs aux piéces", *Sociologie du Travail*, 1966, No.1, p. 83.

4. In analyzing the individual's decision to leave the organization, March and Simon write the following: "The most important single factor evoking the alternative of leaving appears to be the objective existence of serious work alternatives (Behrend, 1953). In general, the greater the objective availability of external alternatives, the more likely that such alternatives will be evoked. The environment, therefore, forms one important source of cues for the participant, but not the only one. He is subject to at least four other types of cues that help determine what set of behavior alternatives will be evoked. First, in a complex organization (particularly a business organization) he is peculiarly receptive to cues from the formal hierarchy. These include both the intended ones—falling under the rubric 'control'—and the unintended ones. Second, cues emanate from the task itself. Third, a number of important cues stem from the officially prescribed work rewards. Systems of payment not only influence behavior on the job, but also evoke various behavior alternatives. This is particularly significant when the task is a simple one. Fourth, the individual receives cues from his associates in the organization. The work group itself provides information that often suggests alternatives of action. This may take the form of imitation, as when discontent of others serves as a cue." J.G. March and H.A. Simon, *Organizations* (New York: Wiley, 1958), p. 53.

8 The Problem of Correcting the Control Mechanism Interactions: The Workers' Reaction

Examining the distortions in the enterprise control mechanism and "negative" workers' behavior (Chapter 2 of our study), we have come to the conclusion that their interrelationship is a close, but undoubtedly an indirect one. Insofar as the limited scope of our research and the equally narrow limitations of industrial sociology have made it possible, we have supported our assumption by facts and have proved its correctness. Concentrating our analysis on (performance-related) patterns of workers' behavior (Chapters 3–7 of our study), we have stated that in people's types of action a role was played by a whole system of consciousness-based, social and material-economic micro- and macro-factors. In other words, the workers rationally adjusted their actions to the environment in which they lived. They have, in fact, transgressed this commonplace kind of statement (which is however, not yet sufficiently realized by a great many economic and social leaders), and tried to assess the main factors determining workers' behavior: their role, importance, weight, and the way they work. We have disclosed the interest and power relations, also embodying the effects of the environment, as well as the system of transactions established as a result of these relations and reflecting a given state of the environment.

The system of interrelationships described—so as to give a true picture of the situation and provide a basis for the elaboration of measures designed to cope with the present troubles—needs certain refinements. Without wishing to change the construction held by us to be correct, we find it necessary to devote a separate discussion to a few aspects of the relationships that deserve to be specially accentuated. We are doing so simply because this may influence the future development and may present a critical review of the steps taken so far.

Interaction and Reaction: The Failure of Enterprise Measures to Counter "Negative" Behavior

One aspect of refining the interrelation system outlined in connection with the types of workers' behavior is the weighing of the continually prevailing complicated interaction of the determining factors. The various forms of workers' behavior are not simply the result of the combined

effect of certain factors generally held to be important, but the products of a definite constellation of factors characterized by a specific state of internal interactions reinforcing or weakening each other. Viewed from this angle, the individual factors can be regarded as important in themselves only in a limited sense as their successful operation is not an isolated phenomenon, but a function of the constellation as a whole. The patterns of workers' behavior are, as already demonstrated, decisively determined by the people's material-economic positions (inside and outside the plant and inseparable from each other). Although this may be generally true, even with the complete correspondence as to this factor, diametrically opposed forms of workers' behavior may arise. For example, workers over 30 years of age with identical material economic backgrounds behaved quite differently in the Cziffra sheet-metal workers' group than in the Honner or Engel assembly fitters' group. The former regulated, "optimized" their performance, while the latter maximized their efforts. This means that in the constellation of the factors determining workers' behavior a few seemingly insignificant factors (as, for example, the composition of groups) happened to be different. Hence, the utterly complicated interaction of certain factors reinforcing or weakening each other, often inverting their mutual efforts, is a very important momentum that warns us to be cautious in both assessing and handling these problems. Moreover, it becomes doubtful whether only correcting certain allegedly or actually important factors (for example, the material and non-material incentives) can eliminate "negative" workers' behavior unambiguously.

Another aspect of relationships is the problem of reaction, which is closely tied to the above. So far we have assumed the relationship between workers' behavior and their environment, in order to avoid superfluous complications, to be of a one-way type. We have pointed out that, through certain transmissions, the environment determines people's actions, but have said little about how the behavior significantly modifies certain factors of the environment. It may even put an end to some and bring about new ones. A typical example is the informal organization whose existence is disapproved and even denied by enterprise managers (at least at the workers' level), but which does exist nevertheless. The informal organization of the plant arose from performance regulation initiated by individuals with the aim to realize performance tactics at a higher level than before. The reaction of human behavior upon the environment is a momentum which cannot be disregarded either when

viewing certain policy measures. This may completely distort the effects even of the seemingly excellent and literally implemented administrative measures. A convincing example is provided by the observations made at a Budapest enterprise of the electrical industry in 1968. The enterprise management wanted to differentiate the earnings in order to increase the efficiency of workers' incentives. In revising wage rates, which had already occurred three times that year, the personnel department decreed the "minimum" amount of wage increases. The foremen, who made the decisions broken down by individuals, seemingly adhered to the prescriptions. At the first wage revision, pay rises were given to about one-third of the labor force; at the other two—which also took into account the "minimum" set by the personnel department—the rest of the workers was compensated. Hence the final result, despite the enterprise management's intention, was the equalization of wages. Thus, the administrative measure was subject to criticism. But if rule-making and transactions among people move into opposite directions the rules must inevitably be violated.

In the present Chapter of our study, we shall be concerned with the possibilities of overcoming "negative" workers' behavior—types of human action deviating from or opposed to the aims of the enterprise, with the steps taken so far and with the alternative measures suggested. The basis for our argument on workers' behavior will be the system of relationships established by us, supplemented by weighing the interaction and reaction relations, which are of primary importance in discussing the question.

A common feature of the measures taken or proposed for overcoming "negative" workers' behavior is that they are directed toward correcting the enterprise's control mechanism, the system of economic and noneconomic incentives. They affect beyond that at most macro-factors that, in the general opinion, "hamper" the establishment of an effective incentive system. Setting out from Tayloristic reminiscences, enterprise managers, economists concerned with organizational issues, generally place emphasis on the necessity of further development of the system of material incentives. They maintain that with broadening the wage scale, with determining by "scientific" methods the incentive factors influencing earnings ratios (piece rates, job grades, personal wage rates, etc.), it is possible to realize distribution by results, to make incentives more efficient, and (since they presuppose a direct relationship between incentives and human action) to wind up "negative" workers' behavior.

All this, however, in our view, makes it indispensable to liberalize the wage system of the economy, to loosen and differentiate the system of average-wage control, that is, to revise the central regulation system of the economy. Instead of the improvement of noneconomic incentives, social leaders, sociologists, and psychologists urge the modification of the social conditions of work (the development of shop-floor democracy, workers' participation in enterprise decisions, the forging together of "socialist" collectives, etc.).

In recent years, the enterprise under discussion made repeated and manifold efforts, by the very means of correcting the control mechanism, to cope with its workshop troubles. With all possible means accessible to it, the enterprise tried at the most critical points of the economic incentive system to make its operation more effective. The establishment and preservation of the essentially faultless piece-rate incentive system served practically the same objective. The enterprise, unlike other engineering plants of the country, took care not to set a lower limit to wage nor to put a ceiling on them. Although it was aware that it was unable to make unrestricted payments to its workers in line with their efforts, it also knew that the legal restriction of work performance by wage ceilings and the equally legal protection of workers from the consequences of slacking ensured by wage limits might have catastrophic effects on production results.

For the operation of this wage system, the enterprise created the necessary organizational conditions. At the same time, it made every effort to harmonize its individual factors with the requirements of the performance principle. The repeated piece-rate revisions in essence also served this objective as well as the abolition of the rigid system of personal wage rates and its substitution by distribution coefficients. (This measure will be discussed in this Chapter in more detail.) Moreover, such modifications of the incentive system as the introduction of progression among sheet-metal workers were also designed to act toward this objective. Led, partly, by similar considerations, the enterprise management, making use of its limited possibilities, conducted a more liberal policy with incentive bonuses, rewards and overtime. Sometimes it did rot refrain from an extremely strict direct administrative intervention in order to achieve a greater labor discipline. It urged at the same time the application and perfectioning of certain instruments of noneconomic incentives (socialist brigade movement, work competition, institutional forms of enterprise democracy). But all these efforts led, as is unambigu-

ously revealed by our study, to very few appreciable results and further confused the already troublesome situation.

This leads to the question of which factors are responsible for this failure. In our view, the following:

1. There is no direct interconnection between workers' behavior and the operation of the control mechanism (see Chapter 2 and the subsequent chapters of our study), hence the correction of the control mechanism alone is unsuitable for putting an end to the "negative" forms of action.

2. The measures taken to improve the efficiency of incentives are unduly limited to the field of the control mechanism. Although this is an organic part of the enterprise as a whole, the operation or failure of the control mechanism is in close interaction with the operation of other mechanisms and institutions of the enterprise, and also with the external socioeconomic circumstances.

3. The relationship between workers' behavior and the control mechanism is not a one-way relationship; the elements of action and reaction are equally present. Not only do distortions of the control mechanism evoke certain types of workers' behavior, but it is also the other way round. The appearance of such types of workers' behavior is again caused only by the joint impact of the internal and socioeconomic environment.

Interaction Relations: The Interconnection Between the Control and the Decision Mechanisms

The control mechanism plays a peculiar, prominent role in the business organization and is therefore designed to ensure people's activities in line with the organizational goals. This is clearly reflected in all formal institutions, functions, sub- and superordination relations, obligations, responsibilities, rights, etc.

The formal institutions determine, to a certain extent, the characteristics of the control mechanism.[1)] Thus, for example, the control mechanism uses quite different incentives for upper and lower management and for labor. At the same time, the successful operation of the control mechanism also sets certain requirements on the working of other internal institutions of the enterprise. Thus, the *disfunctions* of the control

mechanism give rise to distortions in the operation of other institutions, and the other way around.

In analyzing the operation of the engineering enterprise discussed here, it can be demonstrated that with respect to the factory unit the steadily increasing distortions of the control mechanism starting from 1964–65 were accompanied by a similar phenomenon taking place in the decision mechanism. Instead of the often desirable decentralization process, centralization tendencies were increasingly gaining ground.

The decentralization of decisions in the wage system of the factory unit was made necessary primarily by the fact that the competent functional department of the enterprise, the personnel department, under the given technological and organizational conditions of railway coach manufacturing, was simply unable to form an objective picture of the requirements of the work carried out in the plant, or of the efforts made by the various trades, work groups and individuals. The data available on the performance and hourly earnings of trades and groups provided little information about the situation, and an insufficient basis for any decisions on incentives (piece rates, job grades, personal wage rates, overtime hours, target bonuses, etc.). In fact, the personnel department's information was inadequate. Those sufficiently informed were the members of the low management. Yet the situation over the years changed in such a way that the functional department more and more curtailed the decision rights of the factory unit management and concentrated them in its own field of authority. This change is clearly demonstrated by the increasing centralization of the decision-making related to piece-rate revisions.

Only foremen and other lower managers directly supervising production are in the position to judge piece rates. Let us take, for example, the work of sheet-metal workers. "Their work is such that the workers level a sheet as long as they want to. Every sheet is different." Thus only a foreman who continually watches his men's activities and knows the knacks of the trade as its best worker is able to tell the average time that is needed for the "leveling" of sheets of one railway coach, if the workers are professionally and physically suitable to meet the requirements of their work. Similarly, only the supervisors in the lower management can have a true picture of the capabilities of the workers and groups: only they can tell whether "an upswing" in performance is due to a looseness of piece rates or to an accidental recruitment of workers of exceptional abilities.

Earlier, this fact was taken into account to a certain extent. The 1963 plan ensuring "continuous piece-rate resetting" prescribes that "the wage accounting department is obliged to prepare a statement by plant units and accounting groups (work groups) for the enterprise management and the technological departments. The enterprise management, together with the technological departments, has to examine both the low and the high output percentages." This means that the exclusive body possessing information, the plant management, also participates in making decisions on rates. In the course of subsequent piece-rate revisions, it was the personnel department that determined mechanically how many standard hours the factory unit (the plant) was obliged to report according to the performance attained, disregarding to which extent the production result was due to the loosening of piece rates. Then, although at that time there were inevitably differences in piece-rate levels among the individual factory units, the management still had the right within the factory unit to tighten the piece rates where it was deemed necessary. At the piece-rate cuts of 1969 the personnel department also determined mechanically how many "standard hours" the individual trades should report, hence they "put back" to the same level the performance not only of the factory units, but also of the individual trades within them. All this contributed to the steadily increasing distortions of piece rates. While in certain trades the piece rates remained relatively loose (for example those of the assembly fitters), in others they became almost impossible to fulfill (some machine operators were hit especially hard).

The information needed to evaluate the individuals within the groups was also available to the factory unit management and to the foremen. This situation was clearly reflected in some wage developments (such as the raising of personal wage rates) when it was the factory unit management that made the decision. Besides this rare occasion, however, the factory unit management's say in determining personal wage rates was minimal. According to the enterprise wage regulation, in 1964 the plant manager was still entitled to change the worker's personal wage rate according to his work done, to "rank" him-regardless of any ranking criteria. He had the right to reduce or raise the personal wage rate and even to grant any exceptional rates (in the iron industry a maximum of 14 forints, which was very high by present-day standards). By 1968, this system was no longer applied in practice; the rights of the factory unit manager dwindled, and the rigid criteria (length of practice, occupational skill) set by the personnel department were primarily and

automatically prevalent. As far as we know no one's hourly wage rate has ever been reduced, nor has anyone received an exceptionally high wage rate. Moreover, the system was so rigid that the manager of the factory unit himself was unable to grant a pay rise of only one forint to his machine operators (two or three persons!), who were seriously affected by the 1969 piece-rate revisions, and indispensable to ensure the continuity of the component production. By the time the manager received the permission of the personnel department, the workers had already left the enterprise.

The situation was the same as regards incentives (and overtime). The factory unit manager had a very modest "manager's fund" to dispose of (about 10,000 forints annually), while target bonuses, constituting a multiple of the latter (about 200,000 forints in 1967), were set by the production department only after "serious troubles" had set in. The same applied to overtime. Many maintain that the reason why the wage disputes and output restrictions of 1967 and early 1968 cost the enterprise so much (incentive bonuses, overtime) was that the situation had greatly deteriorated. The factory-unit manager, although fully aware of the likely consequences, was unable to act. For lack of resources he was unable to suggest any solution until the danger became imminent. The production and personnel departments were not willing to pay before that. The same was the case with piece rates. The local leadership's warnings that troubles would follow were not listened to before they really ensued. Then extended bargaining began, first between the factory unit leadership, on the one hand, and the production and personnel departments, on the other, before the extremely rigid machinery started moving.

The steadily increasing centralization in the decision-making mechanism after 1964–65 greatly contributed to the enterprise management's extreme inflexibility in the application of incentive measures, in spite of its utmost readiness to take the initiative in modifying the whole incentive system. While a significant part of the workers (for example, sheet-metal workers) perceived the impulses coming from the environment, quickly evaluated and reacted to them, and, what is more, developed stereotype defensive and even offensive reactions to similar phenomena over the years, the enterprise management was fairly insensitive to signals coming from the plants and only perceived "explosive" impulses. Moreover, its reaction was retarded by the pitfalls of the formal decision-making mechanism.

It would be a mistake, however, to think that such centralization of decision-making was elicited by a kind of "subjective" endeavor (the management's unjustified insistence on power). The personnel department was simply compelled to concentrate all possible power so as to cope with the extremely difficult and almost chaotic labor and wage problems, with the many-sided pressure imposed on it, and to find some solution by trying to take consistent and coordinated measures (see Chapter 6). The wage ratios of the factory units and plants within the enterprise were repeatedly upset, the problems of labor shortage appeared simultaneously at several points, the managerial staff of the factory units constantly required money (direct wage rises, target bonuses, overtime, etc.), and, occasionally, the production department also supported their demands. The labor line, however, had to observe not only the wage ratios, but also the average wage level—all these at a time when a large-scale labor turnover affected all strata of the work force. So a natural, although perhaps not right reaction was the centralization of decision-making rights, the deprivation of power and curtailment of means of local leaders, of factory unit managers urging the enforcement of particular interests, threatening to upset the whole labor and wage balance. Hence, the matter in question was that the disfunction of the control mechanism—the emerging or aggravating plant problems (drop in performance, slackness, labor turnover)—distorted the decision-making mechanism in several ways. This, in turn, further increased the distortions in the control mechanism. At the same time, this interaction also appeared in a much more direct way. The economic incentive system of the enterprise neglected, or, for lack of resources, was compelled to neglect the motivation of the lower management (foremen, senior foremen, and plant supervisors) to such an extent that the enterprise could hardly expect its lower managerial staff to defend enterprise interests (see Chapter 5). Lower managers were indifferent and apathetic. As a result of their material interests being neglected and also because of their qualities, they proved, in general, to be poor. Under such circumstances, despite their disposing of the information necessary for decision-making, the enterprise management could simply not entrust them with taking certain decisions. (The case, for example, of the wage construction based on the distribution coefficient method, to be discussed later, clearly demonstrates that members of the lower management urged—contrary to the enterprise's interest in wage differentials—the workers' wage levelling.)

The Workers' Reaction: Piece Rates and Distribution Coefficients

Along with the factors already discussed, workers' behavior significantly contributed to the distortions of the control mechanism. The performance tactics of workers (as-pointed out in Chapter 2 of our study) regularly disrupted the functioning of bonuses and overtime as incentive factors. But the workers' actions also made themselves felt in the development of the so important *piece rates and personal hourly wages*. These actions were just as purposeful as the performance tactics and inseparable from them, as people's interests were committed, after all, to changes in the incentive factors, to "distribution", even more directly than to production. Therefore, definite types of attitude and behavior have come into existence, such as the commonly known demand for wage levelling.

Differentiated performance tactics used by workers in the factory unit and the arbitrary regulation of the output index made it completely impossible for the enterprise to have a true picture of the current state of piece rates. What the personnel department knew was that the situation was chaotic. A significant part of the workers, in order to keep the level of their performance unchanged, consciously tried to obscure the real situation. As an official of the personnel department said (about a railway coach manufacturing- unit):

> Formerly piece rates were established on the basis of previous experience gained in the process of railway-carriage manufacturing. Taking into account the piece rates of previous types, the technology department set reliable rates for new types, unless there were any baroque ornaments on it. Today it is not like that. As soon as a new type comes, the workshop starts bargaining with the department of technology. Let's take the example of electricians. Their tasks are very complicated: they have to install a lot of numbered wires, those belonging to the lighting, heating, and air-conditioning equipment. When the production of a new type starts, the installation is carried out on the basis of drawings, so it needs a lot of time. Therefore, people will fight for more time than necessary. Piece rates will be loose, requiring some revision. But there is no period in the year appropriate for doing so. The workers become slow if they

> get to know the company's intentions. And at the end of the year the company has to deliver products to get money from the bank. Then there is a rush and nobody cares whether quality meets the requirements or not. Once piece rates seem to be very tight because of workers' tactics, on other occasions appear loose, due to the rush toward the end of the year. Thus, as a result of the workers' making use of the circumstances, piece rates are set in accordance with a process of bargaining.

It can be added that rates are generally loose in collectives capable of using tactics and of a low skill level and may often be unrealistically tight in groups maximizing their performance and of a high professional skill.[2)]

Personal wage rates regulating individual earnings ratios within the group had, as outlined in Chapter 3 of our study, serious deficiencies: they were not set according to the workers' actual efforts but on the basis of factors only occasionally apparent in performance (primarily seniority), they were not sufficiently differentiated, and they were extremely inflexible. For the elimination of all these deficiencies, in 1968 the personnel department, after carefully examining all possibilities, introduced the so-called *distribution coefficients*. The department left it to the workers themselves and to their direct leaders (foreman, group leader, and shop steward) to distribute the group's wage fund if they found that the individual earnings ratios created by personal wage rates were not adequate and to distribute the group's wage fund in proportions determined by the group members in a *democratic* way. These new earnings proportions were incorporated in the so-called distribution coefficients replacing personal wage rates. The new system held out the hope that earnings would better adjust themselves to output and that the matter of wage differentials would make some progress.

The distribution coefficients provided the possibility that the individual earnings within the groups, independently of the rigid requirements of the rating system (length of job practice, professional training), would flexibly follow individual performance and abilities, hence having an incentive effect. The group could change them by the quarter. Workers with previously high earnings had—in principle—to press hard to get the same amount of money but a further increase in proportion to their capabilities and efforts was still possible. At the same time, also those

with poor earnings had the possibility—in principle—to enter the ranks of the best.

The new system entrusted the determination of the individual workers' distribution coefficient to those who really had a true picture of who did what, and who were also directly interested in the result of the decision. This seemed to be a good example of the desirable decentralization of decisions.

But the distribution coefficients did not fulfill the expectations placed in them. They came into conflict with those enterprise goals that they were designed to serve. In the groups (where the workers were willing to introduce them) the distribution coefficients followed in broad outlines the hierarchy of personal wage rates and made individual earnings more equalized than they were by personal wage rates. They did not induce workers to release their hidden reserves or contribute to the elimination of troubles in the field of output. On the contrary, they further increased the distortions in the distribution by results, and deteriorated the efficiency of economic incentives.

Knowing the interest and power structure, and the transactions established within the enterprise, this result of the introduction of distribution coefficients was not surprising. By introducing them, the enterprise management wished, in fact, to modify one firm pillar of the interest and power relations, of the transactions established and institutionalized (through the informal organization) within the plant, to change individual earnings. But an established structure, with its basis remaining unchanged, does not tolerate any radical changes in one of its pillars. The existing interest and power relations, as a result of the enterprise intervention, began to move rapidly. Individual workers' strata and leaders of the lower management evaluated the measures from the viewpoint of their own particular interests, introduced their instruments of power to defend their interest, and concluded a transaction. This process found its reflection in those types of behavior that, appropriately supported by ideology, were exhibited by workers and foremen in the matter of determining the distribution coefficients, of modifying and differentiating the hierarchy of individual earnings. The result was by no means a rigid rejection of enterprise intervention but rather a rational exploitation of the possibilities it offered from the point of view of the interests of the workers and the lower-level managers. Instead of undertaking a detailed analysis of the phenomenon (we have already done so in a previous paper of ours) we shall point out just a few of its interesting implications.

The labor force's interests in determining the distribution coefficients were just as differentiated as in the issue of performance-related behavior.

The powerful leading stratum constituting the informal organization deliberated over the question in several aspects. For one thing, its privileged position earnings were due, to a significant extent, to its high personal wage rates. Hence, it was a basic interest to perpetuate the previous situation, rather than to permit any serious hierarchic changes in the earnings within the groups, and even to prevent the equalization of individual earnings. On the other hand, a basis of the informal organization ensuring its power was the homogeneity of the earnings of its individual members. The informal organization might induce a certain forging together of the earnings differentials within the cliques, between them and the attendants, which was desirable. Likewise, the positions of the informal organization might also be strengthened if the difference between the earnings or outsiders and those of its members was smaller. To a certain extent, the two interests were contradictory. The direction in which the informal organization developed depended on several factors:

1. On the tactics used by the leading stratum of the group concerned for defending its interests, whether it made efforts to obtain money from the enterprise or applied the means of staff keeping to increase its earnings at the expense of younger workers.

2. On the strength and stability of the group's informal structure, which was possibly held to need further strengthening.

3. On the strength and direction of the pressure exerted by other workers' strata (opposition and periphery) and the leaders of the lower management.

The opposition stratum, contrary to the leading stratum, demanded the adjustment of the hierarchy of earnings within the work group to the hierarchy of performance and efforts, or at least a radical equalization of individual earnings. This stratum, which included young workers living under hard material pressure, required radical economic changes. These workers worked hard, but, owing to their low personal wage rates, earned little. They would have liked to reach radical changes by the introduction of the distribution coefficients.

The periphery stratum had no definite position on that question either.

Similarly differentiated were the interests of the foremen. They usually urged a certain levelling off of individual earnings. It was, on the one hand, equivalent to a certain scaling down of the high pay of the best skilled workers. These high earnings, significantly surpassing those of the foremen, violated the sense of prestige of the members of the lower management. On the other, wage levelling helped to lessen the tensions between opposing workers' strata (the guiding and opposition strata) and to put an end to intragroup quarrels, often putting the foreman in an inconvenient situation.

The result of the interest and power conflicts between the individual workers' strata and the lower-level management can be seen in Table 23.

In the Cziffra, Lázár, Oláh and Trencsényi groups, where the leading stratum constituted an absolute majority and offensive performance tactics were pursued, the introduction of distribution coefficients merely brought about a slight change in the earnings proportions (the differentiation index fell from 0.11 to 0,09). The sheet-metal workers' Cziffra and Oláh groups, where the leading stratum had extremely strong power positions and a stable informal structure, rejected the distribution coefficients from the outset and kept the original personal wage rates. (A stable structure resists outside intervention much more effectively than an unstable one.). By a moderate lessening of wage differentials the Lázár and Trencsényi assembly fitters' groups created better conditions for cooperation both within the cliques and between the cliques and the outsiders. They strengthened their own ranks—against the enterprise. In the Jancsek and Neumann groups, defensive performance tactics were followed. With the leading stratum being in the minority against the periphery, a significant levelling of wages was a step toward broadening the informal structure. This required certain short-term sacrifices on the part of the leading stratum, but seemed to be profitable in the long run. (The original differentiation index was 0.14, and the new one 0.08.) The fact that the direct supervisor (the foreman) of the two groups was the most poorly paid employee of the lower management, who resolutely called for the scaling down of certain high wage rates for workers, was contributing to the levelling.

With the Engel, Ferenczi, Honner and Péteri groups maximizing their performance, with the leading stratum being in the minority against the opposition, wage levelling was of the smallest possible measure. (The original and the new index numbers were 0.15 and 0.14, respectively.) The leading stratum reached its privileged position not primarily by per-

Table 23: Measure of Levelling Workers' and Foremen's Earnings

Work group	Number of members	Measure of levelling relative deviation of			Stratum representing quantitative majority within the group	
		personal wage rates	distribution coefficient	difference	name	ratio (%)
Cziffra	27	0.10	0.10	–	L+A	74
Lázár	9	0.09	0.06	0.03	L+A	78
Oláh	5	0.06	0.06	–	L+A	80
Trencsényi	14	0.18	0.11	0.07	L+A	71
	55	0.11	0.09	0.02	–	–
Jancsek	19	0.15	0.09	0.06	P	53
Neumann	15	0.13	0.06	0.07	P	57
	34	0.14	0.08	0.06	–	–
Engel	9	0.12	0.11	0.01	O	55
Ferenczi	27	0.17	0.14	0.03	O	70
Honner	6	0.16	0.11	0.05	O	50
Péteri	10	0.11	0.11	–	O	80
Antal	7	0.10	0.01	0.09	–	–
Benkő	5	0.13	0.02	0.11	–	–
Rónai	7	0.10	0.10	–	–	–
	19	0.11	0.04	0.07	–	–

- L stands for leading,
- A stands for attendant,
- P stands for periphery,
- O stands for opposition.

formance tactics, but by the regular "exploitation" of the hard-working young workers. Its advantageous position was due exactly to their relatively high personal wage rates. Therefore, its cliques stubbornly (and, in general, successfully) resisted the opposition's wage-levelling demands. This gave rise to serious tensions and further sharpened the chronic conflict of interests between the two strata.

For the Benkő and Rónai component fitters' groups, being in a defenseless position, the intensive wage levelling (with the original and the new index numbers-being 0.11 and 0.04, respectively) meant a primitive manifestation of defense against the enterprise (cf. the transactions

described in Chapter 7).

The Question of Manipulation: The Problems of Noneconomic Incentives

The ultimately unsuccessful attempts at liquidating "negative workers' behavior and, in this context, at correcting the control mechanism raise the problem of manipulation, a rather pejorative concept as interpreted by the social sciences and public opinion. What do we understand by manipulation? Manipulations are, in our view, all those restricted interventions in the socioeconomic environment that, by superficial corrections hardly affecting the structure and causing only slight modifications, hope to attain a radical change in people's action. Such activities, having practically no influence on the intricate relation system, on the whole structure determining human behavior, can achieve temporary, though never long-lasting "success". This may even lead to a further worsening of the situation in the long run, by either innocently or consciously misleading people. Manipulation is, in general, a "palliative" treatment applied locally where "the shoe pinches". It may temporarily create the illusion that something positive has happened until people recognize that their circumstances have largely remained unchanged. But it should not be forgotten that a wide range of such interventions at a certain point turn into a qualitative change, exceed the stage of palliative treatment, basically affect the structure, and raise the hope that eventually radical changes will ensue. Such measures of manipulation are already covered by the concept of *reform*. Therefore, we have some reservations concerning the use of the term *manipulation* in a pejorative sense. Besides reaching certain modest positive effects, manipulative acts may potentially be part of a reform.

The charge of "manipulation" was first brought up in sociology against the human relations school founded by Mayo, which urged changing the noneconomic social circumstances of work performance and claimed to have the power of a "cure-all". This does, of course, not mean that classical Taylorism was not, with respect to most of its proposals, of an equally manipulating character. Taylorism saw solution to industrial problems exclusively in the creation of an economic incentive system based on "scientific methods". But this in itself is an impracticable way, as we have just demonstrated in this part of our study. Impracticable because the relationship between the control mechanism and workers' behavior

is indirect, because the control mechanism is in an intricate interaction with the operation of the other enterprise institutions and workers' behavior. Therefore in a sense all those measures can be regarded as manipulations (piece-rate setting, the introduction of distribution coefficients, etc.) by means of which the enterprise tries to correct the control mechanism.[3] But the classical cases of manipulation, as we have said, are the initiatives conceived on the ideological basis of the human relations school. These include the enforcement of workers' participation in decisions, shop-floor democracy, democratic styles of management, and the development of collective spirit. Just as the revisions of economic incentive measures, all these endeavors as parts of a reform can be very positive, but when prescribed as a cure-all they are extremely weak and have negative effects by raising vain hopes of improvement of the state of affairs.

Very often, the followers of the human relations school do not deny their manipulative intentions. E. Jennings and F. Jennings write:

> Managements look with skepticism on group methods which integrate conflict and utilize maximum participation, because they are a departure from custom. The president of an organization said, "Do you mean to tell me a stock boy can help me to manage my business?". It is certainly not impossible that the stock boy could give the president some ideas, but the president is thinking of the stock boy sitting on the board of directors. This is not intended, and anyway the stock boy would be extremely uncomfortable, but a visit with the stock boy and some of his fellow workers for an exchange of opinions and experience would give the president some idea of *how to manage* the stock boys".[4]

To put it briefly, those at the lower levels can be invited to participate in the "democratic" debates relating to common decisions when the decisions have already been taken and the purpose of the invitation is to make them accept the decisions. Or, lower-level representatives may be allowed to *make decisions on insignificant matters whose result is indifferent to the management*. All these manipulations raise the false impression of participation and autonomy and are artificially produced to ensure the workers' cooperation and their agreement to accept the organizational goals without jeopardizing their position.

The human relations school approaches the question of cohesive col-

lectives in a similar way. As Seashore has pointed out, the output of highly cohesive groups deviates from the production rates of the factory more frequently and to a greater extent than those of less cohesive groups. And deviations may mean both higher and lower productivity. This statement also applies to the enterprise discussed. From this he has drawn the following conclusion:

> With respect to productivity the positive value of cohesiveness in the work group appears to be contingent upon the administrator's success in developing among the employees a feeling of confidence and security in the management of the organization ... To assure a positive benefit to the organization from group cohesiveness the administrator might well take steps first to provide the basic conditions of equity and supportiveness which warrant employee confidence in management. A policy of "divide and conquer" ... may be partially effective, but the greater gains appear to lie in a policy to "unite in common cause" as expressed in the positive emphasis upon the formation of cohesive work teams.[5)]

Hence, ensuring the cooperation of workers' collectives depends on a confidence-building style of management, at least in Seashore's view.

The real problem, however, lies in the fact that such kinds of manipulations in the sense of the human relations approach can bring forth positive effects only where the basic economic problems in the relations between the enterprise and labor can be regarded as solved. As Etzioni points out, "Finally, one must recognize that many plants which have human relations programs are among those in which pay is highest, working conditions best, and unions most accepted. The use of the human relations approach may improve the worker's social situation without sacrificing his economic interest."[6)]

In the plant discussed, the insistence on workers' participation in decision-making, and on organizing the socialist brigade movement are manipulations conceived explicitly in the spirit of human relations. In making all these initiatives merely formal and finally intolerable, a role was played by the peculiar interest and power relations and by the chronic conflicts of interests developed exactly on economic questions. As regards the common goals of increased economic efficiency and setting in motion internal enterprise affairs, neither the interests of the enterprise management and labor nor those of the individual workers' strata

coincided. A significant part of the workers would have been willing to work more and better if they had been given long-term economic (occupational and promotional) perspectives. Under the given circumstances, the enterprise did not, and could not, provide this, yet it demanded that its workers make greater efforts.

A long-term compromise of interests between the enterprise management and labor could not develop either, nor among the individual workers' strata. The so-called common goals of the future proved to be weaker than the deviant and opposing interests of the present. And yet, if conflicts of interests are hidden below the surface, the functioning of such institutions of participation and conflict solving as production conferences necessarily assume a formal aspect.

In all this, power relations were also assigned an important role. The production conference could only become a forum to resolve sharp conflicts of interest (assuming that they were legally based) if it had the appropriate power to represent workers' differentiated interests. The trade union, for the very reason of its set-up, was unsuitable to carry out this task. The enterprise management could simply not allow a debate over its incentive policy and measures, even though it was largely aware of their negative features, because it was not in a position to change them. Nor could it share its power of decision-raking directly with labor or the trade union, because it did not have the necessary power itself; its hands were tied by average-wage control. The realization of shop-floor democracy presupposes the concentration of sufficient power at the organizational level for making the most important decisions affecting the members of the organization. (The insufficiency of the means of power made itself felt, by the way, also in the fact that the enterprise management withdrew the decision-making authority not only from the workers, but also from the lower-level supervisors and factory unit management, so as to concentrate it in its own competence.)[7]

Absolutization of Obstacles to Efficient Incentives

The disclosure of the intricate system of interrelations determining workers' behavior makes it possible for us to start arguing about a few common attitudes concerning the obstacles to efficient economic incentives necessary for the realization of distribution by the work done as well as wage differentials. We wish to criticize the notions about the role of the so-called "backward way of thinking", of the shortage of incentive means and of money, which have become widespread in our country.

Enterprise managers, who assume a direct relationship between the operation of the economic incentive system and workers' behavior, trace negative workers' behavior, just as the deficiencies of economic incentives, to the poorly differentiated state of central economic regulators, primarily to the *regulator of average-wage control*, which is, with certain amendments, still in force even today. In their view, it is the origin of all those distortions that the inappropriate functioning of the incentive system (piece rates, job grades, personal wage rates) gives rise to. It is, in the final analysis, also responsible for the inadmissible levelling of wages. In fact, the enterprise managers' complaint is not directed against fixed per capita average wage levels, but against the practice of actual implementation. An engineering manager asked:

> How can they expect us to enforce the performance principle in the workers' wage system, if this principle is not effective in setting the enterprises' per capita wage level? Although the output of various enterprises within the same functional ministry [engineering industry] is highly different, there is a world of a difference between their production levels, and yet the average-wage level is roughly the same. A hat is carried around and the enterprises throw different amounts of money into it. Then another hat is carried around, from which each individual enterprise takes out the same sum of money, which is rather small. And then they continue to say: comrades, you should bravely differentiate! Yes, but what from?

As a matter of fact, the logic of hardly any complex economic system would make it possible for laws at the micro level to preserve their validity against completely opposing laws at the macro-level.

The economic leadership also lays the blame on average-wage control for the fact that workers are, in general, resolutely opposed to wage differentials (which is looked upon also as a "negative" form of behavior). Since average-wage control determines the level of earnings very strictly, workers insist on the further equalization of wages even to a greater extent. Indeed, the average-wage level is one of the most important macro-factors, which—according to the present-day state of Hungarian economic development and social objectives—exerts a decisive influence on the interests of both the management and labor, on intraenterprise power relations and on the development of the system of transactions.

Average-wage control, as we have pointed out, exerts an extremely great influence on the operation of the most important element of the control mechanism, the economic incentive system. It makes its effect felt in the functioning and distortions of all incentive factors—piece rates, personal wage rates, job grades, overtime, target bonuses, etc.

The effect of average wages and of the shortage of money also manifested itself in the types of workers' behavior related to wage differentiation. We examined in the factory unit's 19 work groups the relationship between the levels of per capita monthly earnings (in 1968) and the wage differentials "tolerated" by the groups. The average monthly pay (without overtime) was about 2,300 forints. Following the introduction of the distribution coefficients, the relative deviation of earnings with higher than average payments was 0.11, while it was only 0.08 with less than average earnings. These average index numbers relating to several work groups, however, were due to highly varied and extreme interests. This also shows that the deficiency of the incentive means and average-wage control, although important, act only in an indirect way on the functioning of the incentive system.

Those social leaders, who attach a significant role to noneconomic factors, including, among others, the consciousness-based ones, in the development of workers' behavior, trace the deficiencies in the performance principle and the equalization or wages to similar factors. There are views according to which effective incentive methods, the principle of distribution by work performance, are hampered by "backward" thinking, coupled with the extensive stage of economic development, and by the enterprise managers' obsolete way of thinking, rooted in the past, but still surviving in the present. It is a common view that the great labor demand and staff keeping measures are the heritage of the extensive stage of economic growth. Even today most enterprise managers still hold that realizing the latter is simpler than the former. Because it has been dominant for a long time, the knowledge it requires is more common and is ingrained in the managers' consciousness.

This same approach often leads to the conclusion that the greatest obstacle to income differentiation is the mood prevailing among workers today, maintaining, on the basis of the practice of the past two decades, the major differences in earnings and living standards to be incompatible with socialism. The enterprise managers unwillingly stand up against this public opinion, all the more so as greater wage differentiation also increases the requirements of their own work. (Similarly, the

failure to understand the current national and enterprise endeavors is made responsible for systematic slackness, loose work discipline, careless work, etc.) Hence, this approach regards the independent development of consciousness as an absolute determinant disregarding actual social relations.

Tacitly it denies that the effects of today's economic and social relations also find reflection in the consciousness and actions of workers and their leaders. It is true that consciousness may lag behind the objective reality, and thus some cases of inertia and distortions may exist. Then these are exaggerated, however, both workers and managers are regarded as individuals unable to react properly to the impacts of the socioeconomic environment. In actual practice, as proved by our research in industrial sociology, they act by far not as "victims" of their retarded consciousness, but generally in line with their own interests under the given economic and social circumstances. In most cases they act very prudently, intelligently, and rationally adjusted to the given possibilities. This approach sees the solution of the problems almost exclusively in the "education" of people, in the improvement of canvassing work, and in a change in the attitudes of workers and managers, making them accept the so-called common social and enterprise objectives and interests, while diverting their attention from real solution alternatives inherent in changing the socioeconomic micro- and macro-environments.

The current popularity of this approach (also experienced in other socialist countries) can be traced back, along with the apologetic attitude toward existing circumstances, to the fact that its propagators are not sufficiently informed about the real workplace relations. They are therefore inclined to take for granted the "ideologies" produced by workers and managers in defending their interests and actions, of course in a "socialist" spirit. We have repeatedly experienced that workers battling for levelling or differentiating wages, lower-level executives urging wage levelling, and enterprise managers demanding efficient incentives equally referred to the socialist principle of distribution by performance.

A good example of false ideologies created by the management is provided by a Budapest enterprise that in 1968 argued as follows for the introduction of a performance-based wage plan with a ceiling: "Some workers are ready to endanger even their health and to risk it for increasing their performance percentages". In such cases, "workers have to be protected against themselves by not stimulating them to attain a performance higher than a certain level and establishing a ceiling on

earnings" (extract from a draft wage regulation, 1967). This measure was motivated simply by the fact that performance standards at the enterprise were extremely loose, and the level of organization was low, which (even if sufficient work and material happened to be available) could result in a catastrophic rise in wages. The management, which had no interest in piece-rate revision and thereby took responsibility for the resulting tensions, was reluctant to risk the transgression of the average wage limit. Referring to the principles of socialist humanitarianism they introduced a wage plan that seemed to be a "performance wage system" but was, by its very nature, devoid of any incentive force.

Summary

In the final analysis, the distortions in economic and noneconomic incentives—in the operation of the control mechanism—are equally the products of the peculiar industrial interest and power relations, of transactions and their underlying socioeconomic environment, and, closely related with them, of "negative" workers' behavior. Consequently, the restricted measures ("manipulations") aimed at revising the control mechanism alone are unsuitable to put an end to human activities diverging from, or opposed to, organizational objectives. Nor can they eliminate the deficiencies of stimulation. Deeper and more comprehensive interventions are needed.

Notes

1. In analyzing the empirical relations listed in the present chapter of our study (the interactions between the control and the decision mechanisms, the reaction of workers' behavior to the control mechanism) we rely on the relationships described in Chapter 2 of the study.

2. This phenomenon is commonly known in the West. Sociologists (Roy, Dalton, Whyte, etc.) and industrial organizers have written a lot about it. As shown by the example of the factory discussed, it also exists in our country and presumably plays, a role in the national tendency of loosening piece rates (Figyelő, December 23, 1970). Among industrial workers engaged in a performance-wage system based on piece rates, the number of those whose output exceeded 125 percent between 1969 and 1970 rose one and a half

times, while the number of workers performing less than 105 percent in the same period fell by one-tenth. Industrial organizers in Hungary are urging piece-rate revisions and the development of the administrative apparatus concerned with piece rates (Figyelő). But the problem is that the effect of workers' tactics relating to piece rates—as shown by the case or the enterprise discussed—cannot be eliminated by piece-rate revisions and even involves the danger of a further distortion of the distribution by work done (see Chapter 2). Further on, owing to the technological backwardness of a significant part of industry, the establishment by "scientific means" of more or less well-founded piece rates would require an apparatus that is simply impossible to ensure. If, however, such an apparatus existed, there would be no guarantee that its activity would be really objective, and would not be subject to changes in interest and power relations just as the action of the management and labor. Under the given situation of industrial relations the requirement of objectivity, of a "scientific" foundation is meaningless: its enforcement would not lead to a free bargain but to a "scientifically sanctioned" bargain. Nevertheless, we do not deny the necessity of a revision of piece rates, but its really successful application promoting the functioning of the performance principle is possible, in our view, only if it is carried out parallel with comprehensive measures to change the workers' behavior.

3. It is necessary to mention this because, as regards the solution of these problems, unjustifiably great significance is attached (primarily by labor executives) to the application of the scientific incentive methods as elaborated by Taylor and his followers. Thus, great significance is also accorded to the wage system (for which the Tayloristic approach provided numerous, often extremely complicated alternatives), to the "scientific" establishment of piece rates and job grades, and to the equally "scientific" personal ranking systems (job evaluation, service and merit rating). By no means do we wish to underestimate the importance of this terrain, but its overestimation is also unacceptable to us.

4. E. Jennings and F. Jennings, *Making Human Relations Work*; E.C. Bursk, *Human Relations for Management* (New York: Harper, 1956); quoted by A. Etzioni, *Modern Organizations: Foundations of Modern Sociology Series*, (Englewood Cliffs, N.J., 1964), p. 45.

5. S.E. Seashore, *Összetartó munkacsoportok a vállalatoknál* (Group Cohesiveness in the Industrial Work Group), in S.A. Sutermeister, *Ember és termelékenység* (People and Productivity), (Budapest: Közgazdasági és Jogi Könyvkiadó, 1966), p. 314.

6. Etzioni, *Modern Organizations*, p. 45. We wish to note that certain theories of motivation giving preference to people's noneconomic (social) needs also acknowledge the necessity of satisfying physiological needs first. In other words, the problems of a decisively economic character cannot be solved by noneconomic means. See, for example, A.H. Maslow's theory as reviewed by Delbert C. Miller and William H. Form, *Industrial Sociology: The Sociology of Work Organizations* (New York: Harper, 1964), pp. 616–619.

7. Certain Hungarian theoreticians hold the view that by the institutional development of shop-floor democracy (activation of production conferences), by the application of democratic management methods, by the establishment of the institutional forms of creating collectives (socialist brigade movement) it is possible to bring about a workplace micro-climate that makes workers "satisfied", produces changes in their "labor morale" and contributes to overcoming the current problems regarded mostly to be of a "moral nature". The mistake with this lies in the fact that at an enterprise of today it is in general not the "satisfaction" or "morale" of workers that constitutes the basic problem. The problems of satisfaction and morale have become of secondary significance: they are replaced by problems that can only be approached in terms of power relations and group and stratum strategies. In all this, as we have pointed out, a great role is played by power. The attitudes and ways of behavior of the various groups and individuals within the enterprise are impossible to interpret without making reference to the power relations among them. While microclimate, satisfaction, and morale are consciousness-based social categories, power is a comprehensive (consciousness-based, social, and material-economic) category.

9 Deduction of Workers' Behavior from the Socioeconomic Environment: Revision of the Formal Organization's Operation

The very difficult task that remains to be discussed in the last part of our study is to give a theoretical summary of the empirically disclosed interrelations of human action, of the system and movement of the consciousness-based, material-economic and social factors determining the complexity of workers' behavior. Special reference will be given to the organizational action of the working people and to the enterprise and its operation. This summary is designed to encompass the very ramifying and varied body of the empirical facts listed in the study and to include the theoretical statements made in discussing the individual sets of problems. Moreover, it is designed to draw, according to traditional practice, certain conclusions for purposes of theory and practice. In order to facilitate the performance of these tasks to some extent, or at least to avoid repeated references to the empirical material, we shall set out in our summary from the description of one particular case held to be important from some theoretical point of view. In that particular case, the struggle of opposing interests and power centers appears in a plastic and concise fort, practically all that we have tried to give account of in our study in a sufficiently detailed way and depth will be presented here in a nutshell. Over and above its possible merits in content, the case also appears to constitute an appropriate concluding part of our study because, after the previous discussions and the relevant information, sheet-metal workers, the main actors of our study, need not be introduced again. Neither is it immaterial that this case, which took place in February 1971, supplementing, in a sense, our analysis relating to the period 1962–1969, provides additional evidence that the problems discussed in our study invariably exist, their topicality has not, and could not have faded, as no appreciable change in the structure of the environment determining workers' behavior could have occurred in such a short period. The case, like the other cases already described, is of course not typical. But the relationships presented in it are.

In the plant unit's news, the following short note could be read in early May 1971:

> Sheet-metal workers are doing overtime. The factory unit

> manufacturing coach casings fulfilled its February plan to the extent of 93 percent. Their output in March was already 101.4 percent. The unit is likely to overfulfil its April plan, too. ... At present, only sheet-metal workers are doing overtime on the 25 luggage vans ordered for domestic use.

The background to this was as follows: The enterprise management in 1971, as in all previous years, began to take wage-restricting measures. Simultaneously with launching the manufacture of a new luggage van series, it "revised" the piece rates. According to the functional department, the revision was by 7 to 9 percent; In the workers' view, it was by a substantially higher percentage. Previously, the enterprise had taken care to ensure that the piece rates with new lots to be launched were strict from the very outset (to avoid any superfluous debates). The technological department (as a technician declared) repeatedly realized (upon higher instructions) the performance requirements of the new orders and set new rates for them to prevent "that there should be too much money on them."

In January, "dirty earnings developed in the factory unit, very many made 6 to 7 forints an hour, and only seven to nine out of 200 hundred men earned more than 10 forints. In one of the component fitters' brigade, hourly earnings fell below 4 forints." With respect to the new products, in which workers could not have acquired the necessary job practice, the enterprise of course supplemented the earnings. "In February, the enterprise hardly dared to make the January payments for fear that everybody would leave. On February 12, already "multiplied" wages (wages supplemented by the enterprise) were paid, and only afterward were the pay tickets given to the workers, saying how much their actual earnings would have been without any supplements."

At first sight, the luggage van had not appeared to be too bad to sheet-metal workers. But as soon as the production started, they calculated that by working very intensively on this type, at most an hourly wage of nine forints could be earned because the sheet surfaces of the luggage van—unlike the surfaces of passenger carriages with their many windows—were very large. (The hourly earnings should be compared with the hourly wage rates of sheet-metal workers given in Chapter 3.) After the aforementioned February payday, the levellers were lethargically hammering on the plates for a day or two, meditating what to do. The party secretary of the factory unit (a skilled fitter) gave them the

advice that "if they could earn the necessary money by working properly, they should do so. If not, they should seek justice in the official way." The workers chose the latter. During the breakfast break, the brigade leaders of the "old" and young workers, together with their shop steward, went to the factory unit manager to discuss matters with him. They did not make much progress. When they returned, they did not find their fellow-workers in the workshop. They told them they would not work until they got their money. The brigade leaders and the shop steward went back to the office. The manager of the factory unit offered them a 20 percent temporary pay supplement as a compensation for "learning" the special skill required by the new type of coach. The men did not accept that, saying that they did not need any learning time, as they were not beginners in their trade. They demanded the 20 percent as a permanent pay rise. Meanwhile, the foremen tried to persuade them to resume working, but they would not. Then the manager of the factory unit called the whole brigade into his office, and a sharp debate began. Two young sheet-metal workers (who had just received their party membership cards) asked the manager if he would do the work for that money if he were as old as they. The manager told the two young men to leave his office, but this did rot improve the situation.

The enterprise manager was informed about the developments on the following day and immediately went to the factory unit. The atmosphere was very tense. The workers told him they would not work for the money offered. The manager granted them a fair hearing and declared definitely that he disapproved of their stopping their work. After the interlude on the previous day, the men felt offended: "Workers are listened to only after some trouble." After a short dispute, everybody ("old" and young alike) took their bags and started for the dressing room with the intention of going home. When the situation proved that serious, the manager promised to thoroughly examine their grievances and to take measures after two days.

The workers, who after past experience trusted the manager's words, took up work. The decision came on the third day: the wage rate for levelers was to be raised by 600 forints per carriage. Thus the matter was settled. The sheet-metal workers got "their money", moreover, as revealed in an article in the plant's paper, they were also granted an appreciable quantity of overtime. Thus the factory unit could wind up the backlog in output caused by the introduction of the new type of carriage and put an end to the struggle about work rates.

The only consequence of the affair was that the "old" sheet- metal worker who was held to have set the tone in the dispute with the unit management was dismissed without any note in his work certificate, although the action, as might be clear from our analysis, was carried out by the trade as a whole, guided by an informal "collective leadership". The informal leadership, however, continued to be unaffected. (See Chapter 4 of our study.)

The Socioeconomic Environment: The Most Comprehensive Determinant of Behavior in the Enterprise

According to Max Weber's statement, workers' productive activity is influenced by their "emotional experience" as a whole. In Alain Touraine's formulation, working people react through their organizational action to the state of the entire industrial society.[1]

Both statements formulate what we attempted to prove in an empirical way: the great extent of workers' behavior being determined by socioeconomic factors.

People working at enterprises are not physiological or economic beings (as held by economic executives, professing the principles of scientific management), nor "conscious" or psychological beings (as supposed by sociologists, psychologists, and functionaries adopting the human relations approach), nor organizational, but social beings—which includes all the former, while at the same time going beyond them. Consequently, people's organizational activity is not limited by the operation of the given organization or its individual institutions (for example, of the control mechanism). In the various types of behavior, not only the given formal organizational micro-structure (the enterprise organization and the social organizations built upon it) makes itself felt, but also an informal micro-structure. At the same time, an important role is also played by other formal and informal micro-structures outside the enterprise, such as the family, the community of the residential area, and so on. It must also be taken into account that the environments in which people perform their productive activities or simply live are inseparably tied to the macro-world, to the macro-structure. All these factors combined provide the socioeconomic environment determining the behavior of man working in an economic organization (see Chapter 1).

In the described case of sheet-metal workers, in the behavior of all actors—workers, foremen, factory-unit manager, party secretary, enterprise manager—the individual micro-structures and also the effects of

the macro-structure can be clearly identified. The case took place in the framework of an enterprise and resulted from the fact that a group occupying a peculiar structural position (the enterprise management) brought about certain changes in the operation of the organization that considerably affected the structural position (economic situation) of another group (the workers). Initially, the reaction took place within the framework of the formal structure by utilizing the possibilities ensured by the formal institutions (consultation with the party organization, inclusion of the trade union, negotiations with the manager of the factory unit). After the formal actions ended in a failure, the informal structure joined in the game (stoppage, bargaining with the enterprise manager) leaving the official channels. But the institutions of the formal and the informal structures are determinants of behavior not only by giving a scope for their realization but also by providing a content for them. The action by the enterprise management (wage restriction) was influenced by certain phenomena of the formal structure (the disfunction of the control mechanism, the repeated disruption of wage proportions) and by its own position in the formal structure (in the system of the division of functions and labor). This position made it necessary for the enterprise management to overcome the disfunctions within the hierarchy. The workers' reaction was equally influenced by their structural position (that the measures taken to eliminate the disfunction of the control mechanism were detrimental to them, that they had a strategic position in the work process, were supported by a strong informal structure, etc.). In relation to the content, the effect of the position occupied in the external micro-structure also made itself felt (the economic position of the worker's family, etc.). At the same time, an appreciable role was played by the macro-structure. The enterprise management acted under the influence of certain macro-economic regulators (primarily of average-wage control) and of macro-economic realities (the state of the labor market, the market position of its products, etc.). But the macro-endowments (the housing situation, the state's consumer price and credit policy, etc.) also exerted an effect on workers.

This exposure of basic problems underpins our argumentation that people's actions within the enterprise are determined (as we have expounded in our study) by a whole system of consciousness-based, social and material-economic micro- and macro-structural factors. At the same time, a certain constancy, repetitiveness, and a reappearance of typical forms can be experienced in organizational behavior.This is resulting

from the fact that the organization does not simply consist of individuals but of groups, and strata, whose positions in the various micro-structures (formal enterprise and social organizations, informal organization, family and residential communities) are homogeneous with or differing from those of other groups and strata.

All this means that individuals, groups and strata within the enterprise equally act in specific ways determined by the system of consciousness-based, social, and material-economic factors. These factors, however, regulate human behavior not directly, but indirectly, through transmissions.

Interest and Power Relations in the Enterprise

Within the complex enterprise organization, the determining role of the consciousness-based, social and material-economic micro- and macro-environments of individuals, groups, and strata become apparent in the types of behavior against changing interest and power relations. The interests and the power positions of individuals, groups, and strata cannot be interpreted in isolation: they can only exist in relation to the interests and power positions of other individuals, groups and strata, as parts of the interest and power relations encompassing all contacts among individuals, groups and strata.

In interests, and in the power positions inseparable front them, the individual consciousness-based, social, and material-economic factors lose their independent aspects and assume a form forged in mutual interaction. The interests and the power positions are based not on individual factors or factor groups, but on a definite constellation of factors. In these constellations, although the individual factors vary in scope, each of them—even the seemingly less important ones—has a definite role, and a change in one single factor may bring about a radical modification of the whole constellation.

In the constellations determining interests and power positions, a prominent role is assigned to material-economic factors. (Such a role is played by the "old" sheet-metal workers' economic positions in the formation of their interests and power basis in the extra- and intra-plant structure.) A key role may also be played by such a seemingly secondary factor as the homogeneous, collective character of the workers' job, or its specific strategic position in the system of work processes. The former factor in the case of the "old" sheet-metal workers contributed to the compromise of interests and the establishment of an integrated interest,

while the latter gained decisive importance for their power position.[2] If, however, the primary material-economic factors do not develop satisfactorily, the secondary factors simply cannot assert themselves. This is exemplified by the young sheet-metal workers, in whose case it was exactly the peculiar material-economic factors that prevented the creation of an integrated interest and a strong power position, despite the fact that the position they occupied in the work process was completely identical with that of their "old" colleagues. Similar factor constellations, with the material-economic factors gaining predominance, strengthened the interests and power positions of the other workers' groups and strata, as well as of the lower-level and enterprise management.

The different socioeconomic factors constituting people's environment and the various positions occupied by individuals, groups,and strata in their environment's micro- and macro-structure are all reflected in the interest and power relations within the enterprise.

It is a natural feature of the interest and power relations that the relationships between the interrelated interest and power centers are not in mutual compliance. It is often between sharply opposing interests that there is the most acute lack of power balance, while relatively similar interests are accompanied by a power balance. All this is due to the fact that, although the factors in the constellations serving as the basis of interest and power positions are roughly identical, their roles are different. From the point of view of establishing interests, an important, direct role may be played by prestige considerations elicited by the external micro-structure (residential community), which from the viewpoint of power are only of indirect importance. Likewise, the strategic position occupied in the work process is decisive for the power position, while it is at most of indirect significance with respect to interests.

Developments in the interest and power relations, naturally accompanied by conflict or compromise (or to put it differently: transaction), encompass the enterprise as a whole. (Compare with Chapters 5 and 6 of our study.)

The Role of Conflicts and Transactions in Organizational Behavior

At present, with concealing conflicts being the declared goal, simultaneously coping with conflicts while pretending they do not exist causes considerable problems. In fact, however, conflicts are natural concomitants of the existence of various interest and power relations, of the

differentiated nature of the micro- and macro-structural positions of individuals, groups, and strata working in the enterprise.

Wherever differing and opposing interests supported by powers of different weights meet, conflicts are inevitable. In the case of a balance of power, the conflict of interests leads to a compromise, and a transaction ensuring cooperation between the parties concerned is concluded. In the absence of a balance of power, the conflict of interests will perpetuate, and no compromise or transaction can be established. From the point of view of the enterprise, the former is a positive, the latter a negative phenomenon. This means that the concrete manifestations of conflict are regarded as moving along the borderline between constructive and destructive forms. But, irrespective of the judgment made from the enterprise's point of view, the conflict resulting from the structured nature of people's environment is necessarily a natural phenomenon.

The followers of theories of scientific management and human relations (together with the majority of our economic executives and social functionaries) hold conflicts to be undesirable and are trying, by various means, to promote industrial harmony and eliminate conflicts. By contrast, modern sociology points to the natural social role of conflicts: helping interest and power differences to come to the surface, making possible their confrontation in an open power test, and possibly promoting their solution, which is tantamount to furthering adaptation, the development process of the organization.[3]

In the sense of these considerations, the conflict between the sheet-metal workers and the management at the enterprise under discussion was explicitly constructive, leading to a transaction. Such a transaction is the indispensably necessary precondition for the cooperation of those employed by an enterprise for its successful functioning, because transactions ensure for the parties participating in the organizational activity that they may enjoy advantages in proportion to the burdens they bear.

At present, the movement of interest and power relations within the complex enterprise reflects the states of transactions established or lacking, characterized by a certain constancy in the short run but a kaleidoscopic change in the long run. (Thus, for example, such a constant element may be seen in the transaction repeatedly concluded between the "old" sheet-metal workers and the enterprise a few years ago, which, however, with the termination of the railway carriage manufacturing, with the loss of sheet-metal workers' strategic position, with the change in the factor constellation constituting the basis of powers and with the

upsetting of the power balance, may end at any time.)

The types of workers' behavior as forms of action of individuals, groups, and strata manifesting themselves in various fields (production, distribution), possessing imminent, internal logic, complementing and also influencing each other, are inseparable from the interest and power conflicts, from transactions. These are reflections partly of the interest and power conflicts around the success and failure of the process of establishing transactions, partly of the existence or lack of transactions as a state manifesting itself in human action.

Performance optimization, the cyclical changes between increases and decreases, and also performance maximization reflect processes indicating interest and power games aimed at enforcing a given transaction. Apathetic output reduction, material and energy squandering, and the deterioration of quality, on the other hand, reflect a lack of transaction. A sharp dividing line between the two can of course not be drawn because, if we break up performance optimization into its components, into increase and decrease, these express no longer a mere process, but at the same tire a state, as any increase also signifies the state of an existing transaction. Similarly, quality deterioration cannot be qualified unambiguously either. This, too, may cover the state of transaction (when the enterprise sets substantial incentives so as to fulfill the plan and handles quality control rather "loosely'), but also a process directed toward the conclusion of a transaction (when workers' following a rate revision, hence after the upsetting of former transaction, want to force up their output and wages to the original level in that way). Similarly difficult is assessing workers' behavior related to distribution (among others, wage equalization, preservation of wage differentials, etc.).

Such an assessment of types of workers, behavior demonstrates that, from the point of view of the enterprise, human actions deviating from the organizational goals fluctuate around the borderline between constructive and destructive actions just as the conflicts themselves.

From the point of view of the enterprise, those types of behavior differing from its goals can be regarded as constructive if they reflect the movement of the interest and power relations and project the coming into existence of a type of behavior coinciding with its goals, hence of a transaction (as, for example, the performance tactics of sheet-metal workers). Undoubtedly destructive are those types of behavior that express the lasting absence of transactions, hence a chronic state (long-lasting slacking).

All types of behavior—whatever their assessment from the viewpoint of the enterprise—are in any case natural.[4]

Formal Organization and Informal Organization

Workers' behavior is organizational behavior. The continuous changes in the underlying interest and power relations, the creation and failure of transactions, signify the dialectic unity of such processes and states, which materialize within organizational frameworks and cannot be interpreted without them. The working of the institutions and mechanisms of the formal organization (the complex enterprise: production management and the related social organizations) occupy a prominent place in the factor constellations determining the interests and power positions of individuals, groups, and strata working in the enterprise and ensure at the same time a battlefield for the interest and power centers, a basis for the conclusion of transactions.[5] In both cases a particularly important role is assigned to the mechanism of organizational control, primarily of economic control. But the real problem is that within the complex enterprise as a formal organization there also exists, closely linked with the former (and not only at the workers' level), an informal organization with its institutions and a role similar to that of the formal organization.

The sharpest and most direct critique of the scheme of enterprise operation (as described in Chapter 1 of our study) is the very existence of the informal organization. This informal organization is established naturally with the participation of individuals, groups, and strata taking part in the activity of the formal organization. The informal organizations, whose relation to the formal organization needs clarification, amounting to a revision of the enterprise operation scheme. Taking for granted that both forms of organization exist in reality, it is their mutual relationship and relative weights manifesting themselves in the overall organizational activity that have to be taken into account.

The informal organization, the cliques—indispensable promoters and stabilizers of, but also opponents to changes in the formal organization—are of basic importance from the point of view of both speeding up the development and maintaining the stability of the enterprise. The informal organization not only provokes but also controls the trouble, the disfunctions arising in the operation of the formal organization, the adjustment process of the formal structure, naturally accompanying enterprise development. To put it briefly, the informal organization as a system of peculiar, independent factors and also as a creative agent of

the system of formal factors, while playing an active role in ensuring the creation of favorable constellations for transactions, at the same time spoils the possibility of their coming into existence.

An example illustrating this is the case of the sheet-metal workers, when the informal bonds of the "old" provided for transactions with the enterprise, but at the same time hampered the establishment of a similar transaction between the enterprise and the young workers (the opposition).

All this means that in the operation of an enterprise it is not sufficient to take into account the effects of the formal institutions, but account must also be taken of those of the informal institutions.

The significance attributed to the informal as playing a role in the necessary change and correction or the formal organization requires the clarification of the minimal functions of the latter. Over and above its well-known merits that under the conditions of the division of labor and the distribution of functions, also carrying anarchic tendencies, it means stability, creates adequate communication channels, and ensures the legalization of responsibilities and rights, the formal organization also lays the foundations for the existence and operation of the informal one.

It is usually the formal organization that determines the demand for and the terrain of the informal organization and its development. (It is not accidental that the basis of the informal cliques was provided by the formal units of work organization, the work groups.) Consequently, it is the formal organization that shapes the character of the activity performed by the informal one (for example, the performance tactics of the sheet-metal workers were based explicitly on manipulating certain formal institutions—as, for example, on the "target-incentive and overtime game"). Moreover, the formal organization, however strictly or vaguely its limits are defined in any case requires a superficial conformity of the rules of the informal one (it was for this reason that sheet-metal workers were a "socialist brigade").[6]

The relation between the formal and the informal organizations is not necessarily conflicting. It depends on a number of variables. In the first place, on the extent to which, as a result of the play of interest and power relations, transactions can be concluded at all and, in the long run, in a relatively stable manner. If this chance is not given, sharp conflicts may occur and if it is given, a relatively smooth, constructive coexistence and cooperation between the formal and the informal organizations can

materialize.

The continuous interaction between the formal and the informal organizations will lead to "mixed types" in the area between them, in which the formal and the informal actions are initiated in a hardly palpable way. This is the area in which the informal already becomes a factor with whose existence the formal organization tacitly reckons, although is does not, or cannot, officially acknowledge it.

The types of workers' behavior as organizational behavior discussed by us were conceived and located partly in the formal, partly in the informal sphere, but very often in the dim intermediate zone.[7]

Deduction of Workers' Behavior from the Socioeconomic Structure

We have deduced (in Chapter 1 of our study) the activities of individuals, groups, and strata working in the enterprise, on the basis of public opinion, from the organization itself as the direct environment determining people's activity. Under direct environment we understood the objectives set by the individual institutions within the complex enterprise (enterprise management, trade union and party organization) and the stable organizational structures established for implementing their tactics. The latter included the formal systems of posts, functions, duties, rights and responsibilities, the formal mechanisms of decisionmaking, information flow, control, or the formal rules defining them. In our discussion of the formal mechanisms a prominent place shall be assigned to the institutions of control designed to bring life into the individual organizational structures. We have also pointed out, again on the basis of public opinion, that the behavior of individuals, groups and strata is also influenced by various factors of the direct environment owing to the fact that the enterprise is not an isolated system: its goals, layout,and the whole structure—being embedded in a centrally planned and directed economy—are very strictly delimited by provisions, instructions, and rules issued by central economic and social agencies. Such external factors have an impact on the internal organizational structure and influence its operation.

Workers' behavior, however, cannot be deduced from the formal structures of the complex enterprise, nor from the macro-factors influencing their operation. The informal structure and also other micro-structures (family, residential community) appear as separate, peculiar factors within the enterprise. Not one single formal micro-structure, but

several formal and informal micro-structures together with the macro-structure jointly determine the organizational behavior of individuals, groups and strata. The scheme of tracing workers' behavior will change accordingly. (See Figure 2.)

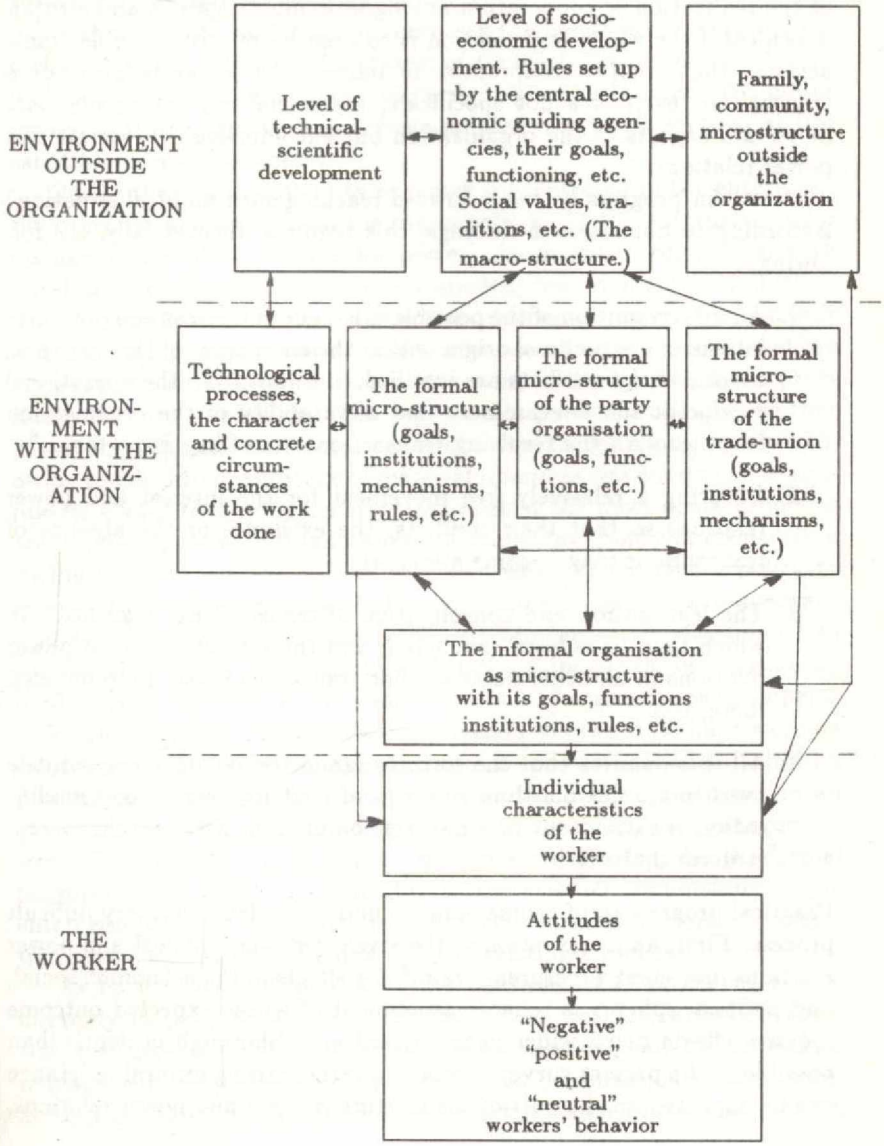
The Problem of Eliminating "Negative" Workers' Behavior

The full-scale elimination of workers' behavior differing from, or opposed to the organizational goals is impossible both theoretically and practically, nor is it necessary. Such a behavior stems from relatively open interest conflicts within the enterprise in which the instruments of power of roughly equal strengths are tested. Its existence within the present-day socioeconomic organization and the given opposing interests is a natural phenomenon resulting when trying to reach a compromise of interests and a basis of cooperation within the organization. Such types of behavior opposed to the organizational objectives (as, for example, the walkout or slowdown of sheet-metal workers) are constructive in the final analysis as they contribute to activities eventually harmonizing with the organizational goals. What is possible and necessary in relation to such types of activities is repressing them to a certain extent, that is stabilizing the transaction representing their constructive achievements.

Much more dangerous and, from the point of view of the enterprise, much more destructive are the types of workers' behavior differing from the organizational goals, but acting latently and lastingly: they may be reflections of a persistent lack of transaction. The elimination of these forms of behavior is definitely necessary and also possible, both theoretically and practically. They include lasting output reduction, consistent poor quality and careless work (in so far as it is due to organizational deficiencies), waste of material and energy, damage to machines, private work during regular working hours and, in a sense, also leaving the enterprise. These forms of action are not manifested spectacularly as they usually originate from the complete upsetting of the power balance, from the fact that workers lose their chance to participate. They can be eliminated if transactions are established.

Setting reasonable limits to workers' behavior held by us to be constructive, although temporarily deviating from the goals of the organization, and eliminating the destructive forms of behavior lastingly opposing the organizational goals, appear to require modifications in the current intra-organizational interest and power relations. The official pyramid of power works only if it itself makes use of transactions. At the same

Figure 2: Deduction of Workers' Behavior from the Scheme of Actual Enterprise Operation



time, it is a fact that the general priority of interest, of the collective objective, may also fulfill a certain function.

From the point of view of the development of workers' behavior (or of the realization of cooperation among individuals, groups and strata), it is ideal if the whole organization is covered by relatively stable transactions, that is, if a compromise of interests, a power balance, or a transaction (even of a not specifically stable nature) occurs not only in certain aspects of the organization but encompasses all interest and power relations.

How can progress be made toward reaching such an ideal situation? According to our research findings, this requires, theoretically, the following:

1. A real recognition of the possible existence of interest and power relations of a structural origin within the enterprise, of the fact that, consequently, conflicts are justified, and that from the operational viewpoint the development and adaptability of the organization together with the resulting transactions are of key importance.[8]

2. Ensuring a relatively free movement for the interest and power relations so that their conflicts, the existence or the absence of transactions may become apparent.

3. The legalization and consolidation of transactions in all fields in which they have been concluded, and the establishment of power relations in all other fields so that transactions may be concluded there, too.

4. All this requires that the formal organizational structure is made much more flexible than so far, and that its long-needed modification is carried out in a natural conjunction with certain macrostructural changes.

Practical progress is, of course, a much more complex and a very difficult process. First, an intervention in the given system of interest and power relations may elicit widespread, ramifying effects in the economic, social, and political spheres, a reliable assessment of whose expected outcome requires efforts much wider in scope and more thorough in depth than possible in the present survey. Second, a rather strong natural resistance can be expected on the part of the existing interest and power relations,

of the established status quo, against all sorts of external intervention. But economic reform has already started this process, and sooner or later the situation will be appropriate for such steps to be taken in a manner perfectly agreeing with the logic of the reform.

With moderate confidence we may risk the assumption that progress toward the establishment of a system of transactions "covering" the enterprise as a whole can be made primarily in power relations.[9] The power system of the enterprise, as has been pointed out, needs revision at two cardinal, inseparable points.

One of them is the quantity of power concentrated in the enterprise, the other its division within the organization. At the enterprise under discussion a kind of "hunger for power" developed in connection with the decentralization process already started, but by far not completed. The enterprise management—although playing an extremely dynamic role and taking in most cases the initiative to call on the members of the organization to work more intensively—was, in the final analysis, practically doomed to passivity. The personnel department complained that it was "unable either to reward or penalize employees appropriately and, owing to the chronic shortage of material resources was compelled to confine its efforts to a symptomatic treatment of the most acute problems and to give up its ambition to *pursue* a conceptual policy of cooperation within the organization. There was no possibility for such a policy to evolve. Under the pressure of the economic regulator of average-wage control, of labor shortage and other circumstances, it was unable to take comprehensive measures to realize the principle of distribution by performance regarded as the basic condition of organizational cooperation. The management was not in a position to reward its hard-working employees and to penalize the slackers. It was compelled to fulfill its production tasks by a smaller or larger number of workers paid on an "average" scale. For lack of adequate power, the enterprise management was not, and could not be able to elaborate any strategy for the formal organization to adapt more flexibly to the existing circumstances: the enterprise policy, at least with regard to the "human" factors of production, was confined to "patching up" the existing structure.

As to the "dearth" of power, the instruments of power were very unevenly distributed at the enterprise. The workers, although there was a structural conflict of interest between them and the enterprise management, had no comprehensive formal organization of their own, at least in the wage disputes constituting the center of conflicts. Owing

to its structure and traditions, the trade union was unsuitable to fulfill this function. But even if it had been possible for the trade union to give effective support to the workers, it could not have expected the enterprise to make decisions opposed to the central nationwide economic regulator, or that would upset the internal wage proportions. The trade union could not have required more say in the affairs of the enterprise than made possible by the power concentrated in the enterprise's authority. It was for this reason that the wage issue could not be put on the agenda of the production meeting, a key institution of enterprise democracy. And if democratism did not extend to discussing the very question most deeply affecting the workers, then it was bound to remain at the level of formalities without any content.

While the formal safeguarding of workers' interests was not adequately ensured, the informal defense of interests, owing to the structure of labor, was ensured for certain privileged workers' strata. These had established for themselves such strong informal power centers that it was possible for them to challenge successfully the power of the enterprise management, enforce (often by reducing output and stopping work) the transgression of the average-wage limit, and reach specifically high earnings. The resulting burdens, however, had to be borne by those workers, strata that had no informal power basis, nor any formal interest representation. These workers were thereby completely driven into a corner: they worked as long as they could, and when circumstances became unbearable, they left the enterprise. Hence, it is theoretically worthwhile to consider the question of decentralization in the sense of the reform, of a further strengthening of enterprise independence. The increase in power of the enterprise, the termination of the "dearth" of power (by the elimination, or at least the loosening, of average-wage control, for example) may, no doubt, be an important step toward a power model of greater efficiency within the enterprise. (For the elimination of chronic interest conflicts and of the lack of transaction within the enterprise, it appears to be necessary to increase the quantity of power.) But the creation of power conditions enabling the transaction system to encompass the organization as a whole would hardly ensure in itself the establishment of the transactions that are necessary, but lacking for the time being. The one-sided increase in power of the enterprise management could replace the current "bilateral defenselessness" only by the unilateral defenselessness of workers. If the new power model is autocratic, it can only lead to the reproduction of problems at a higher level. Multilateral

interest compromises and transactions require a system of multilateral power balance, which in turn makes the trade union indispensable. A system of multilateral power balance means that all strata, groups, and individuals are represented in the multilateral interest conflicts with an adequate extent of power. This can be ensured, however, only by the trade union, i.e. by a formal organization. The trade union must offset not only the enterprise's power, but must also create an equilibrium among the various groups and strata both with and without strong informal positions in the enterprise; if it fails to do so, the bargain between the workers and the management is unambiguously effected, as has been demonstrated to the detriment of certain workers, groups and strata. The path leading toward progress would be cleared if the distribution of power proceeded parallel with the increase in power concentrated at the level of the enterprise, and if this took place in such a way that workers were represented in all enterprise decisions affecting them at all levels of management by an effectively structured trade union, being, in the greatest possible measure, independent of the enterprise management and possessing an adequate quantity of power. This representation of interests would extend over the labor force as a whole, also in the sense that safeguarding the interests of certain workers' strata against those of other workers/ strata would be the task of the trade union. Following this, it would be possible to fill the institutions urging direct workers' participation with real content. At the same time, the existence of such a power model would lay the foundation for the realization, within reasonable limits, of the distribution by results in the control mechanism of the enterprise. Thus it would become possible (among other things through the very development of workplace democracy) to avert the obstacles still hampering the satisfaction of workers' noneconomic demands within the formal organization (appreciation, promotion, right of participation in matters affecting their lives, etc.), the unsatisfactory fulfillment of which workers seek to compensate by other sources of income and informal actions.

The modification of the interest and power relations requires, according to our experience, complex, joint changes within the economic (and social) reforms already launched. All this should take place in such a way that enterprise-level changes (revision of the control mechanism, of the decision-making mechanism, etc.), and modifications in the trade union structure should by all means be in harmony with higher-level policies. This means that local measures should be flexibly adjusted to the con-

ditions changing frequently even within an enterprise, and higher-level modifications should follow more flexibly than in the past the peculiarities encountered under differing circumstances. This is all the more necessary as the micro-structure is a system operating with an equally strict logic as the macro-structure, and the two are inseparable. This is the way in which the interest and power relations can develop within the enterprise, ensuring that their relatively free play in relation to all groups and strata may ultimately lead to a compromise of interests, a multilateral transaction system of adequate stability and covering the enterprise as a whole. It is thereby possible to reduce widespread "negative" workers' behavior to a minimum, to narrow down the harmful forms of action reflecting movements in interest and power relations, and to completely eliminate the extremely dangerous latent "apathetic" types of behavior indicating acute deficiencies.

Notes

1. M. Weber, *Zur Psychophysik der industriellen Arbeit* (Tübingen: Gesammelte Aufsätze zur Soziologie and Sozialpolitik, 1924); A. Touraine, *La conscience ouvriere* (Paris: Aux Editions du Seuil, 1966), p. 129.

2. The power of each member of the organization as against the organization as a whole and the other members depends on the means ensured by a favorable strategic position in relation to the problems determining the success of the organization. M. Crozier, *Organisation et Pouvoir* (Publication of the Groupe de Sociologie des Organisations (C.N.R.S.), p. 10.

3. L. Coser, *The Social Functions of Conflict* (Glencoe, Ill., 1956); A. Etzioni, *Modern Organizations: Foundations of Modern Sociology Series* (N. J.: Prentice-Hall, Englewood Cliffs, 1964); M. Dalton, *Men Who Manage* (New York: Wiley, 1959).

4. As has already been referred to in the introductory part (Chapter 1) of our study and has also been revealed by the above evaluation, the moral classification of the types of workers' behavior into "positive" or "negative" categories leads nowhere. However, such an assessment of the phenomena discussed in our study has found a wide diffusion. In discussing workers' behavior, the individual social functionaries have emphatically contrasted the types described

by us with "the honest work of the large masses of working people". Even if we accept, in principle, that "the large masses" work differently from the people described by us, the question arises as to what "honest" means. Is the "old" sheet-metal worker "honest" or "dishonest" who works twelve or fourteen hours a day to raise the living standard of his family and, in defense against the enterprise, resorts to a performance slowdown or stoppage? Their classification into such and other moral categories is extremely difficult, nor does it reveal any constructive information about the problem. From a moral point of view, it is undoubtedly valuable if "the worker holds the plant to be his own and always acts keeping in mind the enterprise's interest". Doubts only appear when he sees (as, for example, in the case of the enterprise discussed) that his and the enterprise's interests do not coincide. Is it now a moral requirement that in such a case the worker does not act according to his own, but according to an opposing interest? To take such a course of action can only be expected of people who are not fit for life, on whom no stable organizational system can be built. Power is "noble and good" if it is exercised within officially defined formal frameworks, but it is adverse if it deviates from the rules. But why should it be called an immoral action if a workers' group uses its positions, established on the basis of its own qualities and developed consciously or instinctively, for its own defense, for the enforcement of its interests in a way differing from formal rules? Forced transactions, or the process of bargaining preceding them, are, as a rule, hateful. But it should not be forgotten that procedures regarded legal and moral today used to be illegal and "immoral" before. To use an example from the West, strikes in the period of classical capitalism had been held to be harmful and immoral for a long time before they were legalized. Many are inclined to perceive the existence of informal organization or informal activities as a kind of "conspiracy", as an "intrigue" that—with respect to production—is tantamount to "paid but not performed work". However, the informal organization, the cliques, are, in fact, an indispensable means of defending individual and group interests and values, of satisfying noneconomic needs, of forging enterprise collectives. Moreover, the informal organization is also a natural organization, which gave rise, historically, to all social and economic formal organizations existing today.

5. In order to understand the dynamism and the facts of negotiating power, we must pay attention to the organization serving as its basis. Power appears not merely as an abstract concept but also as a process inseparable from the organizational process. Exchange transactions are concluded not accidentally, nor on the basis of abstract and theoretical forces. They are the results of a game whose rules are often strict and determine "the ways", the manipulation opportunities for the main actors, and are also designed to formulate, finally, the strategy of the actors (see Crozier, *Organisation et Povoir*).

6. Dalton, *Men Who Manage*, pp. 221–238.

7. In assessing the significance of formal and informal factors within the enterprise, it is necessary to keep an adequate balance between them even if we recognize a certain priority of the formal organization. Researchers of bureaucracy and of administrative structures (Weber, Parsons, Mills, Rheinstein, Urwick, Dimock) often seem to overestimate the role of the formal institutions, and attribute to them the power of accelerating the progress toward definite aims. Others, mainly followers of the human relations approach, place excessive emphasis on the merits of the informal organization (Mayo, Roethlisberger, Whitehead, Homans, etc.). In our country there are examples, in our view, for both extremes.

   An example of overestimating the formal phases is the Tayloristic attitude of industrial organizers. This approach sees the solution of industrial problems in the implementation of scientifically founded formal procedures. The social leaders grotesquely take the same position, building on human relations principles (development of collectives, workers' participation in decisions), but wishing to promote their practical enforcement through formal procedures (the socialist brigade movement, production conferences, etc.).

8. Part of the representatives of Hungarian public opinion are, for various reasons, unable or unwilling to make a distinction between what actually exists resulting from our present-day level of socioeconomic development, what will develop in the future, and what is, for the time being, largely a promising aim only. According to this attitude (represented, for example, by the functionaries of political organizations) all phenomena that are inconvenient to us are, in

an apologetic way, unjustifiably considered to be accidental. Thus, "negative" workers' behavior, conflicts of interest, power conflicts, disfunctions, informal activities, etc. are all marked as accidental. We are far from intending to present the above phenomena, or rather their concrete forms of manifestation, as general developments of industry. Although they appear to be of structural origin, we are fully aware of the fact that a great many similar empirical research undertakings are needed to take a reliably exact account of them. It is for this reason that we hold it to be unacceptable if people (without having available empirical knowledge of adequate quantity, depth and differentiation, and often even without being simply open-minded to receive and objectively assess reality) categorically declare that the actual enterprise operation and the socioeconomic realities coincide already today with their ideals. They do so despite the commonly known fact that ideals, like any absolute standards, characteristically can never be reached, only approximated. All the cited phenomena are considered to be negative because the perception of illusions as realities hampers the latter's disclosure, while proceeding toward long-term objectives may pave the way to a clarification of the current situation and to an acceptance of reality.

9. The question of power requires cautious handling, primarily because the concept itself is highly delicate and difficult to disclose, owing not so much to the use of the term, but to the "ambiguity" of the actual facts. Power makes the explanation of too many problems relatively easy, which warns us to be cautious.

   At the same time, the phenomena discussed are simply impossible to interpret without exploring the power issue (see Crozier, *Organisation et Puvoir*).

APPENDIX

In the following figures solid line means "mutual choice", dashed line means "mutual refusal", and circle represents a member of a group. The further concentric circles indicate a position in the organization of administration management or social organization (brigade leader, trade union function, party membership, party function etc.)

Figure 3: Collective Sociogramm of Component Fitters

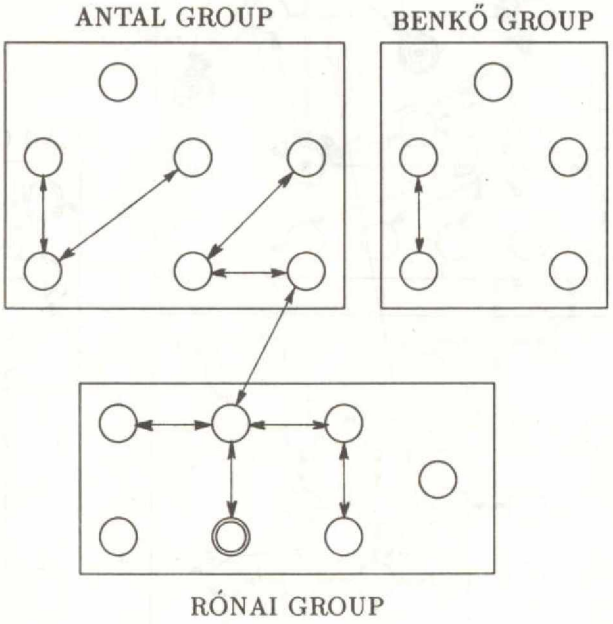
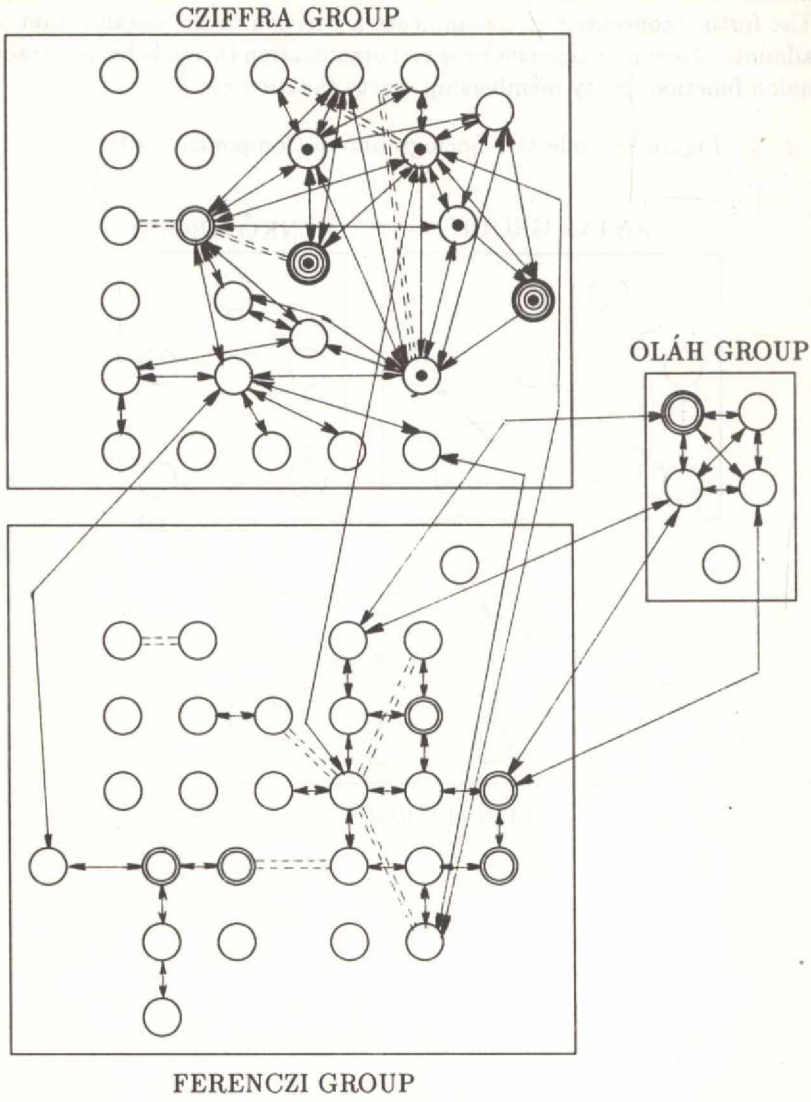


Figure 4: Collective Sociogramm of Sheet-metal Workers



Note: The collective leadership of Cziffra group (the so called "six") are marked by dots in the circles.

Figure 5: Collective Sociogramm of Assembly Fitters I

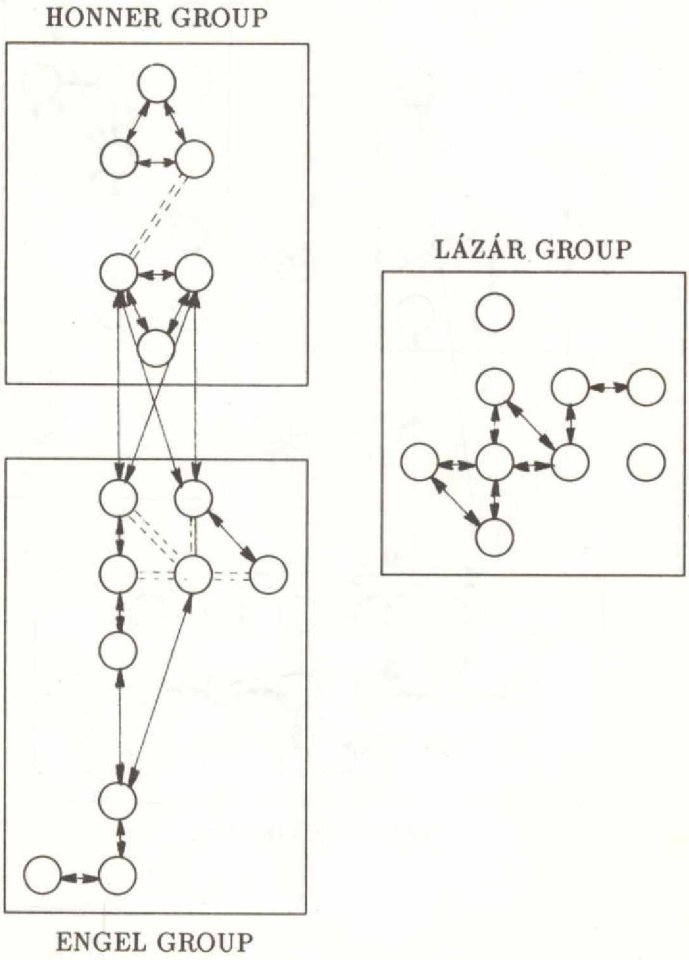


Figure 6: Collective Sociogramm of Assembly Fitters II

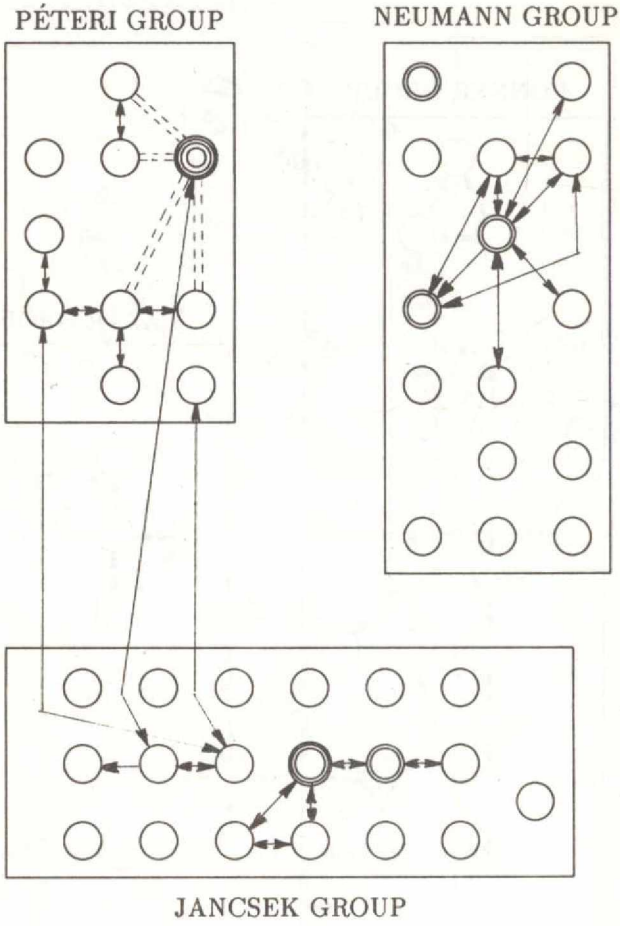
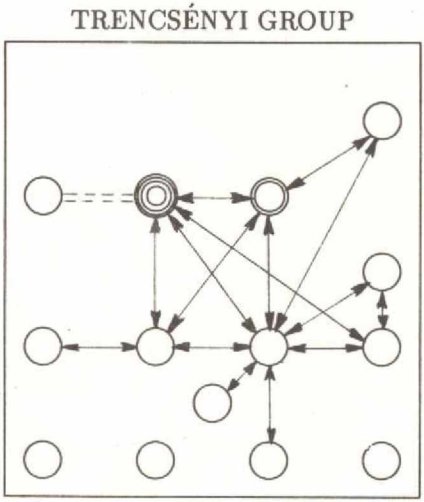


Figure 7: Collective Sociogramm of Assembly Fitters III



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