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CHINESE MANAGERIAL REFORMS IN COMPARATIVE PERSPECTIVE AND A TEST OF MORAL INCENTIVES

by

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A Major Test of Moral Incentives

I discuss here in detail what also turns out to be a major indicator to use on an economy claiming to operate primarily on moral incentives and only secondarily on material ones. I refer to the cultivation within the economy's enterprises of job enlargement including participative enterprise and job administration. A large body of detailed psychological and managerial material gathered mainly by American, British, and Swedish researchers holds that an organization that operates chiefly on the participative approach to job enrichment automatically releases otherwise dormant non-monetary and community-oriented motivators and cultivates them automatically as well to the point of relative primacy over monetary incentives. This contrasts with the primary reliance on labor markets, which automatically release and cultivate monetary and similar other private material incentives to the point of primacy over "moral" ones. If the managerial psychological literature on the subject is true, then the social prevalence of participative administration and job

enlargement constitutes a major test of the relative primacy of moral incentives over material.

Although participative job and enterprise administration is a significantly independent indicator of the primacy of moral incentives, it bears an important relation to the first major test of the relative primacy of moral incentives over material: the operation of comparatively compressed pay differentials to such a degree as to preclude its determination by a live labor market.[1/] The workability of such a severely compressed salary hierarchy is fostered by parallel efforts inside the productive enterprises and government offices to reduce monetary incentives to secondary importance -- by recourse to participative job and enterprise enrichment. One of the most historic reforms of the Chinese economy as it emerged from the fighting of the Cultural Revolution of 1966-69 is precisely its attempts to implement and to deepen participation and other forms of job enlargement in its government administrations and economic organizations. This ideologically motivated reform, influenced by the old socialist and communist classics on participation and job enlargement under communism, was the more significant aspect of the Chinese income-levelling strategy: the redistribution of the non-salary aspects of

jobs that have to do with power, status, and other non-monetary aspects of job satisfaction. Yet, at the same time, Chinese policymakers justify this managerial innovation as a means of improving organizational efficiency. These series of important topics are discussed in this long essay in comparative perspective.

Contrast With Outside Approaches

In the West, many of its management experts continue to endorse various schemes to promote greater efficiency in both government and private organizations. To this end many patended management and organization development training courses proliferate peddled by various external experts for a sizeable fee. One such prestigious, expensive and well-guarded management training package, the Kepner-Tregoe management course, notes that "the cost of unsystematic and irrational thinking by managers is undeniably enormous. If he wants to, any good manager can easily recall from his experience a wide assortment of bungled problems and erroneous decisions".2/ The stress of that course is formal, individually-oriented training in rational-taxonomic thinking about problems and decisions.

Many management experts outside China take a

different approach to management training and organizational development by endorsing, independently of the Chinese, participative patterns of job and enterprise administration. In America, since the early 1970's, piecemeal attempts at job enrichment ~~are~~ have been underway in a number of its large corporations. In Western Europe, job enlargment with participation continues to gain experimental momentum and promises to spread more widely in Sweden. These experiments are, according to its proponents, efficiency-and profit-enhancing, which probably explains increasing corporate interest on the subject.

The American Quantitative Vs. The Chinese ~~Quantitative~~ Qualitative Approach

Finally, we might mention at some length a formal and analytical American approach to raising administrative efficiency. I refer to the unsuccessful campaign in the decade of the 1960's to implement Program Budgeting in government departments and agencies across the land. Five important features comprised that drive. In contrast to the inefficiency-fostering traditional budgeting of expenditures by object and input classifications, Program Budgeting would classify them in terms of program objectives, or outputs sought, regardless of which agency spend

the money or buys the inputs. The four remaining aspects of Program Budgeting are self-explanatory: multi-year budgeting of costs, detailed description of activities zero-based budgeting, and quantitative cost-benefit analysis of alternatives, preferably from a social point of view. This last characteristic some have fancied up under the name of systems analysis.3/

Although it makes sense on purely a priori economic grounds, Program Budgeting failed to deliver the allocative efficiency envisioned by its top promoters and by those who tried to implement it in practise. An important cause of this failure cited by those who have studied the matter carefully was the enormous cost of complying with the five requirements mentioned above and the paucity of analytical and technically-trained personnel who could understand and therefore comply with them. Legal statutes and political bargaining also acted to inhibit the marginal reallocation of budgets to their best social uses. Moreover, the social cost-benefit analyses commisioned by the various agencies concerned indicate the persistence of self-serving and often intentional misinformation for the sake of agency expansion. As the informative Environment recently noted: "A recent government report on a cross section of dam-construction projects shows that advantages

have been generously overstated, cost greatly understate
An in addition to questionable adjustments, "numerous ca
occurred in which there were no supporting data for reput
advantages."[4] This conscious or semi-conscious and sel
interested misreporting is a well-known feature of socie
ties marked by a high level of mutual distrust and low
social consciousness. At any rate, even the most adequa
social cost-benefit analyses have had very little influe
on actual governmental decisions.[5]

Aside from the difficulties above, two previou
cited experts on the field, Merewitz and Sosnick, stress
the difficulty of measuring social benefits and costs:
"Social costs are difficult if not impossible to measure
The reference here is to pollution-type costs external t
the agency and the ticklish issues pertaining to the soc
cost of investible funds. On the benefits side, large
projects require impossible estimation of their total co
sumer surplus of benefits over costs under so-called pri
compensated demand curves. The various adjustments to d
torted given prices caused by private oligopolies and by
the government pose other problems. Then, too, social
cost-benefit analysis disguises ethical assumptions such
as the ethical desirability of the distribution of socia
benefits and costs and the ethical desirability of price-

influencing wealth and income and tastes - - no matter how these have come about. Under these circumstances, the notion of socially efficient investment is meaningless since neither is it well-defined nor is it measurable. Insofar as talk of social efficiency of an act makes sense, it is necessary to specify the goals and their relative worths. And efficiency of the means can only be intuited, not measured. In fact, this is what analysts in international and national development banks do ultimately, in spite of their stress on quantitative measurement of private and social costs and benefits.

This is what Chinese planners and administrators do also. Their investment decisions, insofar as they are consciously taken in the social interest or on the basis of mutually agreed upon goals, are based on common sense intuition of unquantifiable multiple benefits and costs based on group discussion and the coordinated gathering of data including those pertaining to engineering feasibility. In spite of widely state-distorted prices, Chinese investment-taking may not be so socially inefficient, comparatively speaking. Instead of emphasizing formal analytical techniques as ways of improving organizational allocative efficiency, China stresses non-quantitative informal on-the-spot training focused on current problems and

the generation of projects with ~~short~~ immediate visible results. They stress reliance on internal group resource job enrichment and participative management to raise moti vation, communication, trust, and ultimately, output. A noted quantitatively-oriented "management scientist" recen ly gave an evaluation of the American formal and quantita tive approach to improving organizational efficiency: "Most management scientists are still thinking, writing, and operating in a world that is far removed from the rea world..... They often describe and structure nonexistent management problems, tackle relatively minor problems wit overkill tools, omit real variables from messy problems, and build élegant models comprehensible to only their colleagues." He continues: "I have done research in the /management/ area and written a book urging the use of mo explicit decision tools .... I have taught various courses in area, for example, in statistics, management control sys tems, and quantitative analysis. And yet, in the most challenging assignment of my life -- putting together the /U.S./ Price Commission -- I used absolutely none of the management science tools explicitly."6/

Current American and Swedish Enrichment Experiments

In America, the automobile industry and many

corporations in other industries have taken a stronger interest since the early 1970s in what they call human resources development. That qualitative approach to improving organizational efficiency seems to have attracted the public sector, too. As a result more, but as yet atypical, economists have taken a stronger interest in motivational and communicative sources of efficiency -- as opposed to the academic's traditional obsession with allocative efficiency derived from investing and moving given resources to their most remunerative employments with a given fixed level of motivation and communication. Jaroslav Vanek perhaps exaggerates in order to make a good point. He claims that "the aggregate reasonable range for effort taken as a whole may be as high as between 100 and 800... per cent. And, accordingly, the reasonable range of value of product of a given firm will be of similar magnitude. Compared with this, the ranges of variation of possible performance imputable to other factors [such as greater resource mobility]... appear as very small, if not negligible.[7] No doubt then that a growing number of large American corporations are taking a serious look at job enlargement.

Vanek distinguishes three components of effort each varying between 100 and 200 per cent and that is how

he gets his 800 per cent (2 x 2 x 2 x 100): duration of work, intensity, and quality of work. The Chinese experience, as I shall suggest, shows two other important components of effort, namely, worker initiative and innovative activity, which together with the previously named aspects of effort, are influenced by the level of motivation and communication. When effort is thus broadly seen not as a given fixed datum of the textbook obsession wit allocative efficiency--the orders of magnitude Vanek mentions are probably achievable especially in the medium-ru of a five-year plan.

The Chinese official publications and spokesman claim that what fires the employee's enthusiasm for his work and organization is not his formal ownership of it or his remote formal representation in its top management board. Rather, it is his direct participation with the design and management of his workplace at the lowest shop-floor level. In terms of the passionate and heavy ideological language of the Chinese press: "But public ownership of the means of production alone does not make the workers the masters in their own factories. The all-important question is: Who holds the reins of power in a factory and what sort of line is carried out.....if a revisionist rather than a proletarian revolutionary line

is followed, then public ownership would be empty talk and the factory would be a place where the proletarians would be oppressed and exploited by a handful in a privileged stratum--new-born bourgeois elements."[8]

It is folly for other nations to imitate exactly the new patterns of participative job and enterprise administration being developed in China because some of them are deeply rooted in its culture, history, and political system. But the new Chinese patterns of organizational administration may point the way to the understanding and the solution of some of the most pressing problems faced by private and public organizations elsewhere. For example, Paul Samuelson writes in the latest edition of his well-known Economics that "Specialization too often breeds half men--anemic clerks, brutish stokers. No wonder that men and women, as their real incomes rise in modern society, so often find themselves at the same time becoming socially 'alienated'." He adds: "In modern economic society this process is carried to the nth degree." This extreme division of labor is epitomized by the modern assembly line, where each worker's job is oversimplified into a few operations taking the shortest amount of time. Here a worker labors in a climate of possibly deadening monotomy, and he surrenders control over the pace and sche-

duling of his work to the rhythms of the machine.

Samuelson approves of the Swedish experiments with teams who follow the job rather than stand at one point in the assembly line like cogs in a machine. Having in mind " a slowdown strike by GM workers in 1972 in Lordstorn, Ohio, protesting speed-up on the monotonous Chevrolet conveyor-belt assembly line,..." he adds: "Participatory democracy may be a luxury only an affluent society can afford; but in that affluent society, where the old patterns of subordination and domination in an inflexibl hierarchy may no longer wash, the canny corporation may find that it can no longer afford the luxury of unyieldin refusals of alienated workers' demand for greater autonom and job fulfillment."9/

General Motors has, indeed, responded to the heightened pressures from the new values and levels of aspiration of younger and more educated workers. (At its Norwood plant alone, it faced 4,000 unprocessed grievance on the eve of its record 1972 strike.) It hired a new vice-president in early 1973 and a corps of social psycho logists in charge of enriching workers' jobs. Its aim wa to get organizational commitment from workers in order to reduce absenteeism, high quit rates, poor quality, and a

rising number of complaints and strikes.[10]

Since the Swedish work experiments has influenced American attempts at job enlargement, we might take a quick, instructive look at it. There, small groups of workers in a number of auto plants have been encouraged to grow into skilled and proud craftsmen who might identify with the goals of the organization. In such group assembly, men work in teams of three, each assembling a complete engine, with the exception of work carried out at the pre-assembly stage. Each team decides on the allocation of work, its pace, coffee breaks, and it encourages workers to learn more skills by job rotation. At Saab, where this modification of the assembly line has been tried, a worker could take up to 30 minutes to perform a particular series of tasks. This contracts with the maximum time for any operation on the conventional assembly line of 1.8 minutes.[11] At Volvo, assembly lines at Kalmar were replaced with computer-directed robots, each operated by groups of workers who assemble an entire auto. Yet the attempt to reduce minute specialization may cause a specific output to drop without compensating savings and benefits elsewhere. The Chinese experience with less specialization may help resolve some of the issues involved.

Aside from redesigning the conventional assembly

line, the Swedish experiments with job enrichment have taken an organisational approach to enlarging jobs, a rather radical method of job enrichment the Chinese seem to have taken the farthest in nurturing. Since productivity and technological constraints may limit the extent which assembly line production can be modified, involving workers in other aspects of the total organization is certainly one available way of providing job variety and meaning. Since 1973, for example, all Swedish companies with more than a hundred workers are required to include in their boards of directors two elected workers' representatives. The Grangesberg Company there has moved more in the direction of organizational democracy by having 28 employee representatives in its 41-member top governing council. At one of its plants, the local governing council determined, reportedly, how most of a $200,000 improvement program would be spent.[12/] At one of its steelworks, the editor of the employee newspaper is free to print articles sometimes critical of management. And a manufacturer of electric equipment has moved its office onto the factory floor to help reduce the social gap between white-collar and blue-collar workers. These are all reforms the Chinese have taken much farther and more widely.

The tentative conclusions drawn by writers

watching the Swedish experiments is that it probably raises direct observable costs that may be offset by the observable decreases in the rate of absenteeism and turnover and the reduction of industrial strikes to insignificance, observations also made in the Chinese context. Moreover, it enables its automobile factories to compete in recruiting younger and more educated workers. One possible effect of job enrichment especially of the participative type might be worth speculating about: the reduction of petty theft. A report on the subject observed that: "The dishonest /American/ worker is enriching his own job in a manner that is very satisfactory (for him). This enrichment is costing management, on the average, $1.50 per worker per day."13/

But possibly the largest gain from participative job and enterprise reform is a non-GNP gain having to do with mental health and its possible effect on ncreasing the average life span--the better measure than per capita GNP of economic development in so far as this term means general human well-being. The noted managerial psychologist and proponent of job enrichment, Frederick Herzberg, has harped on the theme of mental hygiene. In his words: "Industry must realize that it is one of the despoilers of man's efforts to achieve happiness--in spite of management's

most sincere attempts to do just the opposite."[14] Her
berg does not connect his idea of greater mental health
with a longer life span. Yet there is a fast-growing r
pectable body of medical research on the major causes o
heart attacks that pinpoints stress, alienation from su
portive groups, and individualistic aggressive competit
impatience. In a review of these recent findings, Time
concluded: "The San Francisco doctors have long insiste
that the American way of life is hard on the heart. Th
Berkeley study suggests that they are right."[15]

The theory behind the Swedish work-experiment
is found in Rensis Likert's two well-known books on par
cipative job and enterprise management. Likert and his
associates at the Institute of Social Research at the U
versity of Michigan claim that the participative managm
style is science-based, having been tested by investiga
on several hundred managers. Several years ago, Likert
his associates tested his theory for twenty Yugoslav fi
which were divided into two groups in terms of financia
success. Firms whose workers perceived that their work
councils participated more in enterprise management (th
in the less financially successful companies) were also
the firms that comprised the financially successful gro
If Likert's theory is science-based, as he claims, we c

suppose that the Swedish experiments will continue to yield both monetary and nonmonetary benefits.[17]

The Likertian Psychological "Moral" Basis of China's Reforms

The managerial social psychology of the new Chinese management style is so well articulated by Likert (in works the Chinese planners have probably never seen) that I shall quote him extensively to establish our thesis that the Chinese economy operates primarily on moral incentives. In contrast to Herzberg's conservative individualistic approach to job enlargement, Likert takes a broader social and organizational approach: "Widespread use of participation is one of the more important approaches employed by the high-producing managers.....This use of participation applies to all aspects of the job and work, as, for example, in setting goals and budgets, controlling costs, organizing the work, etc." He emphasizes: "To be highly motivated, each member of the organization must feel that the organization's objectives are of significance and that his own particular tasks contribute in an indispensable manner ..." Consequently, "The objectives of the entire organization and its component parts must be in satisfactory harmony with the relevant needs and desires of the great majority, if not all, of the members..."[18] From

these views, it follows that "Management will make full
of the potential capacities of its human resources only
when each person in an organization is a member of one c
more effectively functioning work groups that have a hig
degree of loyalty, effective skills of interaction, and
high performance goals."19/

Likert reminds cynics, especially, that the gr
method of decision making and supervision not be confused
with the familiar committees of our experience, which fi
it very hard to reach decisions and seem to take enormou
time: "The group method of supervision holds the superi
fully responsible for the quality of all decisions and
their implementation. He is responsible for building hi
subordinates into a group which makes the best decisions
and carries them out well." To quote Joan Robinson in t
Chinese context: "As one director said with a wry smile
"The achievements of our enterprise are due to collectiv
work, but if anything goes wrong, it is my responsibilit
The universal adoption of the group method of decision
making and supervision inside the organization transform
it, according to Likert, from the traditional, hire-and-
fire authoritarian, and man-to-man system of management
an overlapping group form of structure "with each work
group linked to the rest of the organization by means of

persons who are members of more than one group."[21] We shall see later how this overlapping group form of management, called "network of management by the masses" in China, operates there.[22]

Let us continue a bit further with Likert's distinction between the autocratic man-to-man pattern and the participative style he recommends since it parallels the distinction between the two which the Chinese themselves make. The former system of detailed hierachic supervision is what the Chinese call, in their ideological language, the revisionist one-man management by a privileged stratum of bourgeois elements, management by a few experts, or commandism. Spokesmen of the newly emergent management style write:

> One bad result of the revisionist line in running enterprises such as "you should follow whatever the management says" was that the workers and management cadres were often at loggerheads. During the Great Cultural Revolution, they jointly criticized the "rigid rules and regulations," which shackled the workers and smothered their enthusiasm, and worked out new and rational rules and regulations. In order to grasp the complicated and changing situations in the pits, management cadres often went to the worksites and discussed problems with the workers. In the past, when inspectors found workers down the pits working against safety regulations, they often reproached the workers and reduced or withheld their bonuses. Things are quite different now. Whenever

> problems arise, they discuss with the workers and together find the ways and means to solve them.[23]

Although Likert regards the participative administrative style compatible with capitalism and socialism alike, Chinese ideologists make it one of the two or three principal ways of defining socialism itself. (The other two pertain to the primacy of moral incentives over private material rewards, and the other is production chiefly for enterprise profit.) That Chinese ideology identifies Likert's traditional hire-and-fire system of detailed hierarchic supervision of employees with capitalism itself is clear from this typical reminder:

> ...if the revisionist line is allowed to interfere...then sooner or later the leading cadres would become a privileged stratum and the engineers and technicians would turn into intellectual aristocrates, while the workers would be deprived of their status as masters of the country. And the socialist state ownership of enterprises would become non-existent except in name. That the working class in the Soviet Union has again been reduced to hired slaves of the newborn bureaucrat-monopoly-capitalists is a grave historical lesson we must never forget.[24]

Recall from our general reading knowledge of the Soviet economic reforms that they point to the gradual devolution of decision-making power to enterprise managers

and technical experts, thus weakening in the long-run central administrative planning. Also, the Soviet reforms aim primarily on strengthening the role of private monetary goals and incentives as means of achieving socially set goals and plans. And yet, the so-called decentralization reforms (marked by occasional slight recentralization) may result in greater centralized control within the so-called decentralized enterprise than what existed prior to the decentralization reforms. It is by no means clear whether society as a whole is then less centralized or more so — if the price of macroeconomic decentralization is microeconomic centralization within enterprises.

But to go on with the Likertian description that the Chinese policy-makers themselves make to describe their system: "In autocratic organizations, subordinates bow down to superiors and fight among themselves for power and status."[25/] Aside from the alienating climate thus produced, Likert deplores the administrative inefficiencies created therein. Subordinates hide information defensively and jealously in order to obtain benefits from their respective superiors and in order to pit one peer against another should the likely occasion arise. Each office staffs for peak loads and job boundaries and responsibilities are too precisely defined and jealously guarded. Co-

operation among tasks and departments declines contributing to Parkinsonian bureaucratic growth. Cooperation declines too with the resulting climate of mutual distrus and insecurity.

Here are other important quotations from Likert classic argument for participation that are similar to th those emanating from the Chinese media and the various Cultural Movements (the latest is the anti- ourgeoisie ca paign in early 1975 that infused new life to the anti-Con fucius movement): "Hire-and-fire authority and such rela ted concepts as direction and control and the view that m can only have one boss stem from the underlying motivatio assumption of classical management theory. This theory relies primarily on the economic needs of man." In other words: "This system of management relies primarily on th economic motives of buying a man's time and then telling him precisely what to do, how to do it, and at what level to produce."

Likert stresses that participative job and enterprise administration relies primarily on what he calls cooperative motivation. But that is the same as what Chinese Maoist ideology regards as social and nonmonetary moral incentives. In Likert's words: "High performance

in varied jobs tends to be achieved more from enthusiasm and a high level of motivation.... This system we shall call the 'cooperative-motivation system'. As a general rule, the cooperative-motivation system of management taps not only the economic motive, but makes use as well of other powerful motives,...." But, "as many studies have demonstrated, supervision based on economic needs and reliance on coercive, punitive motivation produces apathy or hostility in the subordinate toward the superior and toward the organization and its objectives .... It also stimulates competition and conflict among subordinates who, as peers, strive for recognition and rewards from their boss and often 'knife' each other to get more for themselves."[26/]

Again, the resemblance with Chinese pronouncements is striking. Chinese Maoists often cite a similar argument as the reason for the overthrow of the bossist system, together with the piecework and bonus schemes that marked the period before the Cultural Revolution of 1966-69. The Maoists, too, preach the necessity of private material incentives. The current idelogical movement against bourgeois-minded persons and practices at all levels of Chinese society insists on the retention of what Maoist call the bourgeois eight-grade wage system, which allegedly

implements the socialist principle of distribution accord-
ing to work. Yet, at the same time, the anti-bourgeois
campaign insists on the preservation of material incen-
tives. They ought to be restricted, however, and gradual
reduced and eventually eliminated.[27]

That, presumably, is the meaning of the dicta-
torship of the proletariat over Chinese bourgeois elements
And that, too, is the meaning of the statement that moral
incentives predominate and politics take command. To
quote from a report on the big Kailan Coal Mine in Hopei:
"workers cooperate and help each other even though they ar
in different shifts, mining districts or mines." And:
"Contrary to what the capitalists and the revisionists
believe, this enthusiasm does not come from enforcing rig
and unsuitable regulations or from material incentives, b
from people's love for the socialist motherland and their
determination to struggle for the early realization of th
magnificent goal of communism."[28]

Confucianism as Taylorism

Whether he deserves it or not, Frederick Taylor
has come to represent the chief philosopher of the clas-
sical managerial system Likert and other members of mana-

gerial humanism continue to attack. In the Taylorist system, management alone enforces the best and simplest work methods. All possible mental and creative effort by workers should be alienated from them and centered in the planning and design departments headed by unusually bright men of a totally different kind of education.[24] Since the average worker is mentally sluggish and lacks creative initiative, since they are stimulated mainly by money and do not identify with organizational goals, workers require detailed centralized supervision from managers who should not hesitate to fire those who fail to meet management's requirements. Many widespread conventional practices emanate from the assumptions above, such as the use of time clocks, payment by the hour and piecework wherever applicable, docking of pay, and excessive preoccupation with quantitative and mechanical methods in quality control.[30]

The anti-Confucius ideological and political struggle attacked these assumptions. In the curious Chinese way of attacking socio-economic weaknesses and deviations from the desired path and promoting cultural movements, they blame too many of these assumptions on a few key persons, notably now Confucius and the politically disgraced Lin Piao. For example, in early 1974, a poster put up by workers of the Peking People's Machinery Plant "blasted the

Confucian idea that 'those who work with their minds govern, those who work with their hands are governed', that 'those above are wise and those below stupid'."[31] Other assumptions of managerial elitism currently symboli by Confucius and other lesser figures under attack are: who excels in learning can an an official; men are superi to women; manual labor are for the masses but not for officials and the educated.

Before we leave this ideological background for the concrete administrative reforms introduced by the Cul ral Revolution of 1966-69, let us explicitly note a signi cant practice only implicitly suggested in the preceeding discussion: the virtual disuse of that ultimate motivato of Likert's hire-and-fire autocratic system, firing. As following account of the various groups and criticism ses sions will further suggest, erring and inefficient worker are improved and trained further, not fired. Note that t may make more social sense than firing in the sense that enterprises acquire greater incentives to improve otherwi laid-off ineffective workers, who are thus prevented from causing the same socio-economic efficiencies elsewhere in other parts of the economy. A management consultant, John J. Tarrant, recently wrote a book covering the agoni of employees and executives who are involved in the firin

situation. Both for humanitarian and efficiency reasons, he recommends a more precisely defined performance review system based on enhanced "job-oriented communication between boss and subordinate." What is the aim of such a program? Tarrant answers:

> Such a program is a people-saving program. When it is conducted with intelligence and energy, it can make a lot of firings unnecessary. If we are to move toward a zero-firing posture, then we will have to adopt workable appraisal review. It's not so bad once you get used to it; and, as a matter of fact, it makes for a more efficient organization. The question is, do we work with men for improvement--or do we fire them?32/

Tarrant's proposal coincides with the Chinese approach. The emphasis on improvement keeps an enterprise from passing on additional costs to third parties, and it raises society's overall supply of nonformal education.

Emphasis on Group Moral Stimulation

With the previous comparative background shedding illumination our subsequent discussion of Chinese administrative reforms, let us take close concrete looks at three Chinese enterprises and see how the general reforms we have discussed apply in practice. Let us concentrate here on the

principal overlapping groups to see how these nurture and cultivate what the Chinese call moral incentives, or, interchangeably, proletarian politics in production. These three representative enterprises are the Shanghai Watch Factory, the Nantung Cotton Mill No. 2 in Kiangsu, and the giant Kailan Coal Mine.[33]

Let us focus then our attention on the lowest productive unit of our representative enterprises. Upon such focusing, we see a fascinating social group as well called the production group. Its larger analogue in agriculture is the production team, where the same priniciples here discussed apply with equal, if not greater force. At Kailan, a dozen or more workers comprise the group, but in the Nantung Mill there are as much as forty two workers in the winding group.[34] Who heads them? The Chinese press tells us that the foremen of old have disappeared as such since the Cultural Revolution, together with the offices of enterprises director and vice-director. Foremen used to head the groups and they had delegated powers to recommend wage-classifications of those workers they supervised. They had powers to assign work, set piecerates, and discipline workers. Now the foreman's place is an elected group leader who differs significantly, it seems, from the traditional foreman. For one thing, one would expect workers to identify more with

worker they elect from their ranks than with someone appointed by top management as its official representative. Secondly, the production leader shares supervisory responsibility with other elected members of the group's managerial board. These are the trade union leader of the group, and those others responsible respectively for political propaganda, quality and operation, accounting, safety, and workers' daily life and welfare. They meet regularly during the week as a sub-group; and so does the production group as a whole in order to discuss production, praise good workers, and explore ways of improving group performance.

A very important feature of Chinese organization appears at this lowest stage in the overlapping group hierarchy. The group's trade union leader conducts political studies for the group about twice a week, usually after work, to tie technical practise with ideological teachings. Here, workers may hear exhortation directed against selfishness, read newpapers, and gossip occasionally. Study groups thus help the formal organization with the informal. It also encourages workers to form warm friendships outside the factory from their own work group, and so fosters the conversion of the factory into a social community. The group leader in-charge of daily life and welfare, for example, may arrange visits with co-workers whose children are sick. The

study group is still one way of exerting social pressure on the workers to their education and work-related activity--on their own spare time as well as on official factory time

The production group determines its own breaks, the pace of work, the rotation and enlargement of jobs. It functions as a forum for workers' suggestions and hears grievances. Wages and recommendations for promotion to higher wage-ranks are discussed here, too. Problems of lateness, absenteeism, poor work are handled at this level and handled by discussion and education—not by firing or cutting down wages. In any of the meetings held by the main production group or any of its various sub-groups workers are enjoined to take an active part in actively changing ol and obsolete ways, by criticising themselves and others constructively and openly. The same goes for cumbersome rules, technical processes, cost accounting procedures, qua lity control, safety, and so on. They are also enjoined to resolutely transform themselves and their environment. By institutionalizing this special brand of encounter group dynamics founded on supportive criticism of inefficient way and selves the various small groups act as powerful catalys of organizational and technical change, aside from enlargi jobs all-around in the process.

At the Kailan Coal Mine, "For instance, quite a number of the old quality-inspection coal cutting systems hampered the workers' initiative. New systems such as self-inspection by workers and mutual inspection within the group are mapped out to ensure that they consciously fulfill their quality norms. Workers' opinions are solicited regarding the whole process of production--from mapping out plans to accomplishment of the task."[35] This applies as well to the Nantung Cotton Mill and to the Shanghai Watch factory and others in state industry. Here then we have the beginnings of what management consultants call horizontal and vertical job enrichment in the larger variety of tasks done by the worker and his involvement with the managerial aspects of given jobs such as its planning, control, and inspection. Frederick Herzberg lists other ingredients of enriched jobs such as direct feedback and contact with users of a worker's products, opportunity for new learning, power to communicate directly with superiors and co-workers, personal accountability, some control over scheduling and costs. These social and technical ingredients making for enriched jobs were enhanced by the various reforms of the enterprise brought about by the post-Cultural Revolution.

Group Solidarity

The production group deserves more notice, it seems, than has so far been accorded to it, since it is th main training ground within the enterprise for cultivating nonmonetary motivation. It doubles as an informal, outsid friendship group. The egalitarian participation of each member in the group and its various sub-groups during work and non-working hours nurtures feelings of cooperative sol darity and reduces mutual distrust. So we are told by com parative implication by the huge volume of small group studies.[26] We may divide solidarity into two aspects. Solidarity with a member of the group means, first of all caring what happens to him. In analytical terms, we say "I care for you if and only if my level of contentment ri with yours." The more intense these feelings are, the gr ter is the cooperative solidarity a member feels for the group. Because of the policy of lifetime employment and tenure, group membership remains more stable than, say, in United States. Manpower losses take the more likely form transfers to other shops and departments in the same facto Either way, group solidarity develops, Chinese ideologists call solidarity as "fight self", and insofar as it exists shirking of production responsibilities is thereby discou- raged. It may even cause members to increase their labor

effort when they are challenged to do so in the annual socialist labor emulation campaigns.

The trade union organizes these emulation contests in our three sample enterprises. In the course of these periodic contests, feelings of solidarity are somehow tapped for output. Each group or shift in every workshop makes an appraisal of its own performance every three months. The factory in question writes up a summary once a year, and the Communist Party Committee then calls a factory-wide meeting at which awards are presented to the outstanding individual, group or shift. These moral titles are "Outstanding Worker," "Outstanding Unit," and "Model Worker of Such-and-such a Factory" to those who are particularly excellent in all the principal aspects of production. Note that the shared exhilaration and pain of "fighting shoulder-to-shoulder" in the emulation campaigns feeds back in the enhancing of solidarity.[37] And with time, emulation contests help reinforces the high performance norms of the official ideology among all groups.

The other, second aspect of group solidarity pertains to its effect in making group values and preferences more closely similar. This tends to reduce conflict and divergent views in regard to the management of the group's

productive activities. Thus, for the sake of the group, members are willing to bend or harmonize their interests wit group productive norms, which, in the Chinese case averages out to high per capita performance because of the reigning growth-oriented Maoist ideology.

Finally, before we take a look at another widespread group, the three-in-one technical design groups, let us note another result of the social science of small group behavior, namely, that group decisions concerning matters o risk show a shift toward greater risk-taking when compared with private individual decisions. Significant risky shift were found to invariably accompany group consensus on decisions. But other studies found, too, "that groups exposed to discussion without the requirement of consensus exhibite risky shifts fully as great as those in a condition requiring discussion to consensus."[38/] We need not, for our purposes here, go into the details of how group discussion causes its members to be less conservative and cautious, except to note some of the main plausible reasons: the sharing of responsibility felt by members as a result of group interaction and discussion; the resulting greater familiarization with the choices considered by the group; and the influence of risk-takers on other members of the group. This tendency of group discussion and consensus in causing

its members to adopt riskier solutions, in conjunction with the Maoist injunction to dare and take bold steps, may have played a causative role in the various spate of practical administrative and technical innovations reported incessantly by the Chinese official press of late.

The Vertically Integrated Three-in-One Group

These famous post-Cultural Revolution technical design groups serve several important functions. Composed of administrator, technician, and a veteran worker, they integrate the three occupational classes together, thus, helping to promote the Maoist policy of abolishing the social cleavage between these three groups. They help raise workers to a position of relative prestige and power with regard to the Chinese technostructure. They also provide ways of enlarging each participant's jobs. One criticism of technicians the official press often noted was that the college-trained possessed knowledge divorced from practise. Thus, at the famous Shanghai Machine Tools Plant, we have a widely disseminated emulative example. Some time ago, a few college-trained technicians designed an internal thread grinding machine. The workers then tried to implement its blueprint in making the parts. But these could not be as-

sembled. Thanks to some workers with rich practical ex
rience, some of the parts were reprocessed and consequer
assembled. The lesson the official press teaches from
is: "Because the technicians of worker origin courageou
broke through long-standing restrictions, they cut the
needed to make the prototype from the usual 18 months to
six."39/

At Kailan Coal Mine, whose design teams are presumably representative of Chinese industry, we read: there are more than 100 such groups in the various minir districts and workshops of Kailan." We read further, pe haps skeptically, that "nearly all of the 3,600 technica innovations introduced from 1971 to 1973 were accomplish by the 'three-in-one' groups, and the most experienced w kers often played the main role while technicians offere advice and suggestions."40/ At Nantung, the workers at time, became aware that the mill's spindles were a key p lem since they could not be operated at the high speed r quired by a greater output. The critical maximum speed the old spindles, the speed beyond which they would star vibrate and wear excessively, was 12,000 revolutions per minute. The mill leadership, unhappy over what it felt bottleneck, organized a technical innovation group to tr make high-speed spindles. It consisted of three maintena

workers from the spinning shop, a cadre from the equipment office and a technician. After a year of hard work and a great deal of cooperation from workers, who made parts for the group, good high-speed spindles operating normally between 18,000 to 20,000 revolutions per minute were invented. In a few more months, all the mill's 30,000 spindles were so replaced.41/

The typical pattern by which workers contributed seems to be this: They first put forward the problems encountered during production; the technicians collected related technical materials before mapping out a design plan; the technicians carried out further research and experiments with the workers and administrators until the project was completed. Yet, another aim of the three-in-one group is to train technicians and managers from those of working class and peasant origins, and many enterprises boast that the main portion or nearly the majority of technicians they now have come from these formerly degraded classes.*/

Meaning of the Primacy of Moral Incentives

We have, for some time now, been referring to the predominance of moral incentives over material ones as if

that phrase were rather well-understood. In doing so, we relied chiefly on the reader's natural intuitive sense for the meaning of moral incentives and on the implicit genera definition implicit in these pages. The time has come, however, to clarify that concept more directly, since it is a complex phrase and various authors have tried defining it somewhat narrowly. Our definition stresses its several different, yet related meanings. My aim here is not to expl the concept fully but to make it less unclear.

In the first place, moral incentives operate pri marily over material" when an agent or agency undertakes a productive act only if it is consistent with net community benefits and these gains are collectively (equitably) shar Note that monetary and other material rewards are not shun ned per se. After all, a major aim of Chinese development is material well-being. The desire for material riches--i the Chinese view--is consistent with the relative primacy moral incentives if it is shared more or less equitably ac cording to established social norms.

Note that the mention of "established social norms" complicates further the meaning of the relative pri macy of moral incentives. Under moral incentives communit goals take precedence over private. Private benefits are

be pursued only if they are consistent with norms regarded as "moral", whether these are centrally-defined community goals or not. In this second meaning, the mechanism of moral incentives is a nonmarket decentralist process, an organizational building-block based on feelings of group solidarity. As such it can be regarded as a technique of decentralizing the centrally administrative economy or the highly centralized enterprise. Ideally, Chinese policymakers view moral incentives as an attitude consisting in the internalized learning of voluntarily working more heavily for the community's profit (goals) and relatively less for private goals that deviate from established social norms. Note that in this second principal meaning "moral" is used neutrally. It merely refers to nonmonetary and nonmaterial means of achieving community goals of whatever kind. For instance, Chinese planners regard the widespread willingness of workers to compete "moral" or social titles as evidence of the worker's desire to serve society including himself.

A Philippine example, at this point, will illustrate the two different yet related meanings of the primacy of moral incentives. In a recent speech meant for private businesses, Minister of Industry Vicente T. Paterno defined "Corporate social responsibility", the Philippine counterpart of Chinese moral incentives: It is "sensitivity to the

social costs of economic activity and to the opportunity t
focus corporate powers on objectives that are possible but
sometimes less economically attractive than socially desi-
rable." Paterno, moreover, defined the social goals in te
of which private behavior would be judged as socially too
costly and therefore as socially irresponsible: "those whi
insist on importing capital equipment and raw materials,
which are locally available in sufficient quantity, satisfa
tory quality and reasonable price; and those which circumve
the Central bank requirement of prior Board of Investment
clearance for importation of equipment in excess of $50,000
Paterno added other social goals to this list, such as
equity, industrial dispersal to rural areas, and the adopti
of labor-intensive projects. He concluded that in the "eve
dichotomy between private profit motivations and national
objectives widens, it may be expected that government regu-
laroty measures will increase..."*/

To make matters even more complicated, the Chines
policymakers also use the term moral incentives to refer to
what mainstream economist call psychic income or psychic
incentives. Now psychic incentives may either be collec-
tively shared or privately enjoyed by the individual. Maois
stress collective psychic incentives over private ones such
as the desire to produce more out of solidarity with the

community rather than for private fame and praise. Yet private psychic incentives qualify as moral incentives, not of the advanced type of the first definition above, but of what might be called the elementary kind. This set of elementary moral incentives--the desire for recognition, for a sense of achievement, for praise, and the like--is clearly preffered by official economic policy to the motive of private monetary and other material gain. The widespread use of individually awarded medals and other symbols of praise and recognition shows that official policy considers private psychic incentives as moral incentives, and so do people outside China. When the desire for private fame, recognition, or status, however, grows to the point of an obsession and to the point of slowing down social production--as in the keeping of productive and innovative secrets--then officials and the media decry such excesses. The Chinese understanding of tapping moral incentives more than material ones thus seems to conform to common outside intuitive meanings of that phrase when that complex term is sensibly analyzed.

F O O T N O T E S

1/ I discussed and stressed this social indicator—perhaps unduly—in my book on The Theory of Moral Incentives in Cuba (University, Alabama: The University of Alabama Press, 1971). On an armchair a priori basis, highly compressed pay differentials such as China's are compatible with a labor markets, but these are not the markets of our historical experience.

2/ See the seminal text by Charles H. Kepner and Benjamin B. Tregoe, The Rational Manager (McGraw-Hill Book Company, 1965), p. 1.

3/ For an authoritative account and analysis of Program Budgeting, see Leonard Merewitz and Stephen H. Sosnick, The Budget's New Clothes (Chicago: Markham Publishing Co., 1971); Public Expenditures and Policy Analysis, ed. by Robert H. Haveman and Julius Morgolis (Chicago: Markham Publishing Co., 1970).

4/ Formalists often express this common sense noti in the abstract mathematical language of the Prisoner's Dilemma non-cooperative game. Thus, high savers or hard workers in the absence of communication and trust—save less a exert less effort for fear of being "taken" by high-spender and by the lazy. This argument has been used to suggest th market rates of interest need adjustment for social cost-benefit analysis.

5/ Julian, McCaull, "Dams of Pork", Environment, January-February, 1975, p. 11.

6/ C. Jackson Grayson, Jr., "Management Science an Business Practise", Harvard Business Review, July-August 1973, p. 43.

7/ See his Participatory Economy (Ithaca, N.Y.: Cornell University Press, 1971), p. 31.

8/ From the unsigned "The Workers Are the Masters" Peking Review, July 6, 1973, p. 11. This is the second in an informative series of three parts on a state-owned factory.

9/McGraw-Hill Book Company, New YOrk 1973 (Ninth Edition), pp. 53-54.

10/Jack Rasmus, "Why Management Is Pushing 'Job Enrichment'," International Socialist Review, December 1974, p. 25.

11/New York Times, December 24, 1974, p. 31.

12/On the Swedish experiements, see also David Jenkins, Job Power, (Baltimore: Penguin Books Inc., 1973), ch. XIII, titled "Scandinavia: Model for the World?"

13/Psychology Today, June 1971.

14/See the New American Library edition of his book, Man and the Nature of Work, New York, 1973, p. xii.

15/See "Culture and Coronaries," Time, August 18, 1975, p. 35.

16/Stane Mozina, Janez Jerousek, Arnold S. Tannenbaum, Rensis Likert, "Testing a Management Style", European Business, Autumn, 1970.

17/Although not universally accepted, Likert and his school cite voluminous data in support of participative job and enterprise management. Rensis Likert, New Patterns of Management (New York: McGraw-Hill, 1961); he updates supportive data in The Human Organization (New York: McGraw-Hill, 1967). See also supportive studies cited in Joseph A. Litterer, The Analysis of Organizations (New York: John Wiley & Sons, 1965), p. 191.

18/Likert, New Patterns, pp. 100, 103, 116.

19/Ibid., p. 104.

20/See her Economic Management in China (London: Anglo-Chinese Educational Institute, 1975), p. 35.

21/ Likert, Human Organization, pp. 51, 50.

22/ Towards the end of this long essay and its sequel titled "More On Chinese Managerial Reforms In Comp rative Perspective".

23/ Hsiang Jung and Mei Tien, "Cadres Are Ordinar Workers: Report from Kailan Coal Mine", Peking Review, Oc ber 1974, p. 35. This is the second of three informativ reports on the new managerial patterns as these operate i this famous mine.

24/ Hsiang Jung and Mei Tien, "Old Coal Mine Reju nated", Peking Review, September 27, 1974, p. 17

25/ Likert, New Patterns, p 109.

26/ Likert, New Patterns, pp. 159, 82.

27/ See, on these points, Po Ching, "Socialism Is The Class Dictatorship of the Proletariat", Peking Review April 11, 1975. A key article on the current anti-bourge and anti-material incentives seems to be the Renmin Ribao editorial of February 9, 1975 titled "Study Well the Theo of the Dictatorship of the Proletariat". Other good sour are the after January 1975 issues of Red Flag, China Reco tructs, and most especially, the wide-ranging coverage of of Chinese news by the People's Republic of China: Daily Report published by the United States Department of Comme No contradiction exists in the current emphasis on the pr servation and attack on private material incentives since the attack centers on the restriction of material incenti and the gradual reduction in income differentials.

28/ Hsiang Jung and Mei Tien, "Socialism Is Ours" Peking Review, October 11, 1974, p. 29.

29/ These well-known Taylorisms are spelled out a justified in detail in Frederick W. Taylor's Shop Managem (1903) and Principles of Scientific Management (1911). B are included in his Scientific Management (New York: Harp & Row, 1947).

30/ See Dean S. Ammer, Manufacturing Management and Control (New York: Appleton-Century-Crafts, 1968), p. 185.

31/ Jen Min, "Keeping Their Roots in the Masses", China Reconstructs, January 1975, p. 8.

32/ See his Getting Fired: An American Ordeal (New York: Van Nostrand Reinhold, 1974), pp. 177-178.

33/ My sources on these three somewhat detailed examples are, respectively: Peking Review Correspondents (unnamed), "The Workers Are the Masters", Peking Review, June 29, July 6, and July 13, 1973; China Reconstruct Reporters, "The Workers Are Masters", China Reconstructs, January 1974, , "Network of Management by the Masses", China Reconstructs, January 1974, , "Workers Take Part in 'Law-Making' and Transforming the Old Mill", China Reconstructs, January 1974; Hsiang Jung and Mei Tien, "Old Coal Mine Rejuvenated: Report from the Kailan Coal Mine", Peking Review, September 27, October 4, October 11, 1974.

34/ China Reconstructs, January 1974, p. 6. The subsequent description of our three sample enterprises are based on the sources named in the preceeding note.

35/ Peking Review, October 11, 1974, p. 27.

36/ See the vast literature surveyed and sampled in Group Processes, Peter B. Smith, ed. (Baltimore: Penguin, 1970).

37/ China Reconstructs, January, 1974, p. 6.

38/ See James P. Flanders and Donald L. Thistlethwaite, "Effects of Familiarization and Group Discussion upon Risk Taking", in Peter B. Smith, editor, Group Processes, p. 367.

39/ See the pamphlet Take the Road of the Shanghai Machine Tools Plant in Training Technicians from among the Workers (Peking: Foreign Languages Press, 1968), pp. 19-20. The two articles therein first appeared in Renmin Ribao on July 22, 1968 and in Hongqi, Nov. 3, 1968. This important pamphlet describes and attacks the monopoly of enterprise power formerly held by managers and technical professionals.

40/ Peking Review, October 4, 1974, pp. 34-35.

41/ China Reconstructs, January 1974, p. 8.

*/ That is also the function of other workers' groups formed, such as the economic management group and t worker-advisors group discussed in the next chapter.

*/ From "More Government Restrictions Poised", Th Times Journal (Manila), August 31, 1975, p. 9.