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WORK ORGANIZATION BEHAVIOUR AND ATTITUDES

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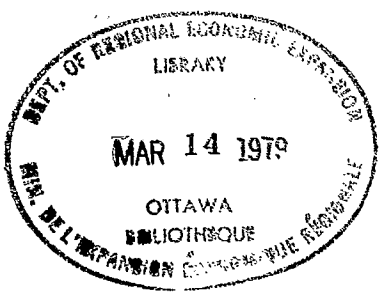
WORK ORGANIZATIONS, BEHAVIOUR AND ATTITUDES

Joseph C. Ryant

Second Edition

A STUDY BY THE
INDUSTRIAL RELATIONS CENTRE
MCGILL UNIVERSITY



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FOREWORD

This publication is one of a series prepared under contract by the Industrial Relations Centre of McGill University for the Department of Manpower and Immigration's Experimental Projects Branch which was transferred to the Social and Human Analysis Branch of the Department of Regional Economic Expansion in July 1968.

The study includes a detailed review of the literature. It also provides a list of major organizational variables which social scientists have identified as affecting success and performance, and an analysis of how the variables affect behaviour. Suggestions are made about the provision of a theoretical abstraction of the variables to make them applicable in diverse organizational contexts.

The results of the study are intended for:

1. Classifying employment opportunities as a basis for prescribing compatible jobs for different types of people
2. Classifying the behaviour required for survival and success in various job settings
3. Identifying and classifying the variables now operating in educational and resocializing institutions
4. Specifying models for social systems in training centres.

The study was expected to clarify partially some questions relating to talent development, occupational allocation, adaptability of workers, training of workers, worker satisfactions and performance.

Dr. W.A. Westley of the Industrial Relations Centre, McGill University, directed the study. He was assisted by research assistants under whose authorship their individual reports are published.

Mr. J.M. Saulnier of the Experimental Projects Branch was responsible for the administration of the contract and the preparation of the material for printing. He was assisted by Mrs. C. MacLean.

WORK ORGANIZATIONS, BEHAVIOUR AND ATTITUDES

INTRODUCTION

In order to adequately assess those features of work organizations which have been demonstrated to affect work behaviour, work attitudes, and levels of work performance, some order must be imposed upon the multitude of factors which have been tested as possibly causative. That this is necessary is a quite obvious consequence of the diverse theoretical and empirical approaches to the phenomena in question. Any review of the literature on the subject, especially when it purports to be eclectic in its orientation, has to take into account the fact that the dependent variables of interest are linked to independent and contingent variables which represent different units of analysis and which describe causal chains of varying length and complexity. What in one study is an independent variable - for example, supervisory style - is in another study a variable itself dependent on either managerial ideology, or capital investment per worker, or managerial perceptions of the motivation of its work force, etc. To adequately assess the effects of variations in supervisory style upon work performance, work attitudes, and general behaviour in the work place, one has therefore to cover the full range of the possible causal linkage.

The method we have adopted is to roughly divide the material into five major categories, all of which have been found not only to be related to the dependent variables of interest but to each other as well. While there

is a certain "rough and ready" character about this division - still being quite far from theoretical purity - and while the classification of some of the material under one heading rather than another is woefully tentative in its theoretical certainty, the advantage sought is twofold: first, to take account of all the significant determinants of work-related behaviour, and second to attempt to establish the validity of an argument for temporal sequences in an admittedly complex and multi-factored causal chain.

The five major categories into which the material has been divided are as follows: technology, organizational structure, intra-personal factors, environmental factors, and interpersonal factors. Within each category, the relevant variables will be treated as independent sources of variation in work behaviour and work-related attitudes. It is hoped that the reader will develop a sense of cumulative contribution to an understanding of the phenomena of concern. While the coverage is far from complete, the literature reviewed is thought to exemplify the more important lines of reasoning within each category.

I TECHNOLOGY

A great deal of attention has been paid to the dehumanizing and alienating effects of modern work, particularly as it results from the inherent characteristics of machine age employment - large scale operations employing many workers in one unit, noise, dirt, mechanical pacing of work, etc. We shall review this literature, but in addition, we shall examine some

of the other effects that are thought to be determined by technological factors. Let us begin with questions related to alienation.

As applied to work, the concern with alienation began with Marx. In his review of Marx's treatment of the subject, Bell (1962, pp.355-392) tells us of the changes which occurred in the relative emphasis placed on the two elements originally considered by Marx. The young Marx saw alienation emanating from two factors - the dehumanization attendant on mechanization and technological aspects of large-scale industrialism, and the exploitation involved in the expropriation from the workers of the fruits of their own labour. As Marx's work became more programmatic, it was the second aspect of the concept that was emphasized with little subsequent attention paid to the inherent alienating features of work technology. Despite this neglect in Marx's later work, the history of industrialism since that time has tended to keep consideration of this question continually salient.

Much of what has been written on the subject is assertive and programmatic. A great deal of it emerges from comparisons of the conditions of workers in modern times with philosophically based conceptions of the inherent nature of man (hence, the term "dehumanization"). However, some material is more closely tied to describing effects as perceived and as felt by the participants themselves, without making assumptions about man's inner nature. It is this latter set of studies that will concern us here.

Before doing so, we should perhaps specify some of the dimensions of possible differentiation in technology.

TYPOLOGIES OF TECHNOLOGICAL DIFFERENTIATION

Dubin (1958, pp.64-65), for example, makes six possible distinctions all of which are thought to be related to the prestige-ranking of the workers involved. These are handwork vs. brainwork, skilled work vs. routine work, creative work vs. routine work, work for which the worker has individual responsibility vs. work in which the jobs are standardized and predetermined, complex work vs. simple work, and finally, work which requires a long learning period vs. work which can be learned in a very short period.

Other authors look at work in terms of the raw materials which are used, the types of operations performed on them, and the nature of the final product produced. The most general distinction of this type is the one used by Pearlin and Kohn (1966), among others, to distinguish between jobs which deal principally with things, ideas, or people. Perrow (1967) makes a much more detailed distinction primarily on the basis of the perceived nature of the raw materials involved and their variability. He adds that work can also be differentiated according to whether or not the required technologies necessitate few or frequent exceptions to the established procedures, and as to whether these exceptions are dealt with in a routine or non-routine manner.

Another dimension in terms of which productive work has been differentiated deals with the extent to which and the manner in which the work

process has been fragmented and subdivided. Dubin (1958) calls this the difference between specialized and subdivided work, the former dealing with integral units of the final product; the latter confined to component bits and pieces of the total process. The many authors who deal with assembly-line work tend to treat it as the ultimate example of subdivision of work into fractioned operations. Work of the former character tends to be labelled as either professional, skilled, or craft work.

This latter distinction leads in turn to yet finer distinctions about the nature of work. Questions of freedom from close supervision, and of discretion about how, and at what pace, the work shall be performed are more usually thought to be related to the intrinsic nature of the technological process than to any other factor.

The question of specialization (as against sub-division) relates to yet another important dimension of technological differentiation. It appears that this distinction underlies the technical terms on which worker interdependency depends. Whether the integration of combined effort is achieved by internalized standards and interpersonal relations (whether formally prescribed or informally evolved) or by building the integrative procedures into the productive process itself through machine methods and machine linkages often appears to be a question of whether or not the particular work tasks involved are specialized or subdivided. Stinchecombe (1957) speaks of the integration of work as achieved by the internalized work standards of a craft, failing which bureaucratic controls are needed.

Blauner (1964), who has pursued the early Marxian treatment of alienation as embedded in work technology, and who has extended the concept, distinguishes between work technologies which are intrinsically conducive to worker feelings of powerlessness, meaninglessness, isolation, and self-estrangement, and those which provide him with control, purpose, integration, and self-esteem. To do this, he divides productive work into craft, assembly-line, machine-tending, and continuous process technologies, a distinction - it should be noted - which encompasses and summarizes many of the differences already listed above.

Blauner's exposition of the relationships between technology and alienation is so detailed that we must, for the sake of brevity, find an adequate way to summarize his findings. Basically, he is describing the effects inherent in four types of technology.

1. A craft industry has a technology which is neither highly mechanized nor extremely subdivided. Its units of work tend to be integral and whole. It relies on a high degree of skill and experience on the part of the workman, and it requires the constant application of worker judgement as to the manner in which the work task is to be performed. Expertise is thought to be a function of experience rather than of hierarchical rank.

2. An assembly-line industry has a technology which has built its design, the extreme subdivision of the total work process, so that large groups of workers perform fragmented sets of operations upon the final product as it moves by them, in a predetermined sequence. Work pace is determined by the speed of the conveyor belt carrying the product to and by

the workers. Since each worker performs but a few operations, designed in advance to be as simple as possible, lower levels of skill and experience are required. Expertise is less a function of experience than of hierarchy.

3. A machine-tending industry is one with a technology which has machines performing the basic work operations, often in a semi-automatic manner. The sequences of work are predetermined by design, but the process tends to be discontinuous in the sense that the machines at any one stage of the process are not automatically linked to the machines which immediately precede and follow their particular operations. Workers are primarily responsible for monitoring the machines for continuous operation, ensuring no temporary delays due to interrupted input of raw material, snarls in mechanism, mechanical breakdown, etc., and for the transfer of the output at one stage of the process to new machines which require these products as their input. As in the case of assembly-line work, skill levels are low except for those workers involved in repair and maintenance work. The difficulty of the work is a function of the number of machines having to be attended.

4. A continuous process industry is one which combines certain features of both the assembly-line and machine-tending technologies. Like the assembly-line, the sequence of work steps is continuous, each stage of the operation being linked to those before and after. Like machine-tending, the basic operations are performed not by workers but the machinery itself. However, the controls are not completely automatic so that workers are required to monitor dials and gauges which report the progress of the raw material through the stages of the process, and which allow the workers to correct and adjust the work process by means of valve-turning, button-pushing, and switch-flicking. The necessary skills are judgemental and discriminatory, as was the case in the craft industry, but the work operations themselves require neither manual dexterity nor the skilled manipulation of tools and equipment.

There are, no doubt, many other distinctions that one could introduce to characterize the variety of work technologies which exist. We have dealt with some of the major sources of variation, and now, we can proceed with tracing some of the existent connections between technology and other factors.

ALIENATION AND TECHNOLOGY

Simone Weil (1962), who had spent some time working in an automobile plant on the assembly-line, was one of the first to speak of the alienating consequences of modern technology. Particularly critical of the subdivision of work into meaningless segments, she also decried the mechanical pacing of the work which stripped the worker of control of his own organism. Piecework, a mode of payment which can be used only in a highly rationalized work process, was found by Weil to be another alienating feature of the experience. While her remarks are based on her impressions of the effects of the experience on her fellow workers, Weil foretells what later, more systematic and less impressionistic studies will reveal.

Walker and Guest (1952), in a highly-regarded study based on interviews with workers in the American automobile industry, reported that assembly-line workers were resentful about certain features of their work. Especially upsetting was the mechanical pacing by the speed of the line, the very small fraction of their work by the repetitive performance of but a few simple operations. The authors reported that dissatisfaction varied inversely with the number of operations each line worker had to perform, and directly

with the opportunity to exercise autonomy over the pace of work and to exchange jobs.

Crozier (1964,pp.76-77), describes workers' reactions to the introduction of semi-automatic equipment into a tobacco factory in which hand operations had previously prevailed. These workers complained bitterly about being "reduced to the condition of robots, human machines, mechanical animals". It appeared to Crozier that the complaints related more to psychological tension than to physical pain or exhaustion.

Kornhauser and Reid (1965), in another study of automobile factories, examine the mental health states of the workers. They find that a statistically significant number of the workers in the most routine and repetitive jobs, that is, in assembly-line jobs, reveal symptoms of poor psychological health. The authors, having controlled for prior education and for pre-job conditions, relate this finding to the intrinsic nature of the jobs themselves. They conclude that it is therefore legitimate to speak of "healthy and unhealthy" jobs, and that assembly-line work is clearly the latter.

Blauner (1964) finds that assembly-line workers are clearly most alienated on each of the four dimensions of alienation which he considers. (Machine tenders were not far behind.) The work technology renders them powerless in the sense that they have little control over the pace of the work, and no discretion as to how it is to be done. The extreme subdivision of the

total productive process induces meaninglessness since it is perceived as unrelated to the totality of the final product. The layout of the plant floor, dictated as it is by the requirements of the belt, necessitates relative isolation from sustained contact with other workers. Finally, the inability to derive satisfaction from work brings about an estrangement from the work self.

Blauner goes beyond some of the direct connections between work technology and worker reactions, and points out how the assembly-line technology is associated with other factors which are themselves determinate of alienation, dissatisfaction, and insecurity. He finds, for example, that assembly-line technologies utilize a low skill distribution of labour, in the sense that there is a disproportionate number of semi-skilled and unskilled workers required. The same is true of highly rationalized machine-tending technologies. Inkeles (1960) and Inkeles and Bauer (1961) have demonstrated that dissatisfaction with one's type of work appears to vary inversely with skill level so that, by extrapolation, we can see how some technologies are more productive of dissatisfaction than others. We must, however, be extremely cautious about the absolute extent to which workers, even at low levels of skill, are dissatisfied. Skill levels appear to be associated with the relative differences in reported satisfaction, but there are often such great differences in absolute magnitude that factors other than technology must also be involved. Data presented by Inkeles and Bauer (1961,p.104)

illustrate the difficulty in attributing too much causation to technology alone. Why, for example, are 76% of American semi-skilled workers satisfied whereas only 45% of the workers at the same skill level are satisfied in the USSR sample. The difference for unskilled workers in the two samples is of even greater magnitude. The conclusion appears inescapable that, whatever the technology, US workers tend to evidence higher degree of of satisfaction.

As Blauner reports it, another characteristic of the assembly-line technology is that, as long as the work process is in operation, every work station must be manned. Therefore, the alternative responses to varying market conditions tend to be either production with full labour force or shutdown with massive lay-offs for certain periods of time. As a result, assembly-line workers are shown by Blauner to be among the highest in the average number of workers laid off per month and close to the lowest among the proportion of wage and salary workers who worked fifty or more weeks per year (1964,p.197). It is therefore not surprising that the automobile industry has almost double the unemployment rate of all manufacturing industries in the four year period examined by Blauner (p.198). That work technology can therefore have strong connections to worker feelings of security or insecurity appears to be an inescapable conclusion. Blauner cites evidence that automobile workers rank close to the bottom of the list of workers by industry in feeling that their jobs are steady (p.199), at the top of the list in the proportion of workers expecting a lay-off (p.199), and next to the bottom of the list of workers optimistic about security or retirement (p.209).

We may look at a summary of some of Blauner's findings. However, we must keep in mind that the data used is not of unquestioned value since it was gathered more than ten years before Blauner's secondary analysis, and since the period in question saw great changes and developments take place in the technological conditions of many industries. We must also note that in the tables which follow, the differences between percentages represent all the factory workers in a given industry, not only those who follow its characteristic technology.

TABLE 1

THE FOUR TECHNOLOGIES ON DETERMINANTS OF WORKER INSECURITY

Determinant	Craft	Machine-Tending	Assembly-Line	Continuous Process
% of workers working 50 or more weeks per year (Table 27)	77.8%	68.1%	57.4%	72.2%
Lay-off rates (Table 28)	0.9	1.5	3.6	0.8
Unemployment rates (Table 29)	3.8	7.2	13.4	3.7
Amount of Education required % of workers who have completed high school (Table 44)	70.0	29.0	40.0	40.0

TABLE 2

THE FOUR TECHNOLOGIES ON WORKER REPORTS OF INSECURITY

Worker Report	Craft	Machine-Tending	Assembly-Line	Continuous Process
% of workers reporting they can have their job as long as they want it (Table 31)	92.0%	84.0%	73.0%	94.0%
% of workers reporting they expect to be laid off (Table 32)	3.0	14.0	29.0	2.0
% of workers reporting optimism about security in retirement (Table 52)	58.0	43.0	33.0	63.0

TABLE 3

THE FOUR TECHNOLOGIES ON PHYSICAL CONDITIONS OF THE WORK

Item	Craft	Machine-Tending	Assembly-Line	Continuous Process
% of workers feeling that they have to work too fast (Table 33)	11.0%	32.0%	33.0%	12.0%
% of workers feeling that their work makes them too tired (Table 34)	12.0	38.0	34.0	19.0
% of workers stating that they can leave work station without replacement for 30 minutes (Table 36)[1]	81.0	49.0	50.0	58.0

[1] It should be noted that this finding runs counter to the usual depiction of the assembly-line technology tying the workers to the moving belt. The described differences between the conditions of work in the assembly-line and the continuous-process technology are not at all reflected by the response pattern to this item. Blauner points out that the survey covered all workers in a given industry, that is, all factory workers in the automobile industry not merely those on the assembly-line, and that the response pattern may be accounted for by the conditions of work for the non-line employees. This, however, was true on all the items, and Blauner cannot have it both ways, ignoring the mixed sample when the distributions favour his thesis, and citing its heterogeneous character when the distribution runs the wrong way.

TABLE 4

THE FOUR TECHNOLOGIES ON THE DISTRIBUTION OF SKILLS

Skill Distribution (Table 26)	Craft	Machine-Tending	Assembly-Line	Continuous Process
% of skilled workers and foremen	70.0%	12.0%	29.0%	30.0%
% of semi-skilled workers	26.0	82.0	64.0	52.0
% of unskilled workers	3.0	6.0	7.0	18.0

TABLE 5

THE FOUR TECHNOLOGIES

ON WORKER REPORTS OF INVOLVEMENT IN THEIR WORK

Item	Craft	Machine-Tending	Assembly-Line	Continuous Process
% of workers stating that their jobs are too simple (Table 43)	16.0%	23.0%	35.0%	21.0%
% of workers stating that their jobs are always or mostly dull (Table 42)	4.0	10.0	34.0	11.0
% of workers stating that they can think of non-work things while working (Table 41)	27.0	54.0	37.0	36.0
% of workers stating they can try out their own ideas while at work (Table 35)	79.0	38.0	47.0	64.0

These data certainly support Blauner's contention that increasing mechanization and routinization, up to the point that the work becomes automated, causes increasing alienation and dissatisfaction. At the point of automation, since skill levels are once again raised, since the work is no longer fragmented, and since discretion and judgement are once again required, alienated responses decrease and worker satisfaction is thought to rise. Inferentially, this conclusion is supported by Foote (1959) and by Vollmer and Mills (1966). Each study examines the "professionalizing" effects on the labour force of the introduction of automation finding that the automated workers tend to have a specialized technique supported by a body of theory, a career supported by an association of colleagues, a status supported by community recognition, and, in the case of the nuclear workers studied by Vollmer and Mills, a special community status related to their responsibility for community health and welfare. Since each of these elements is, on a priori grounds, thought to be rewarding, the conclusion follows that automated technologies are associated with low alienation and high satisfaction.

Faunce and Clelland (1967) compare the labour force distributions of a one-industry city in which the industry is automated with the average distribution for all cities of 10,000 - 50,000. They conclude, as did Foote, and Vollmer and Mills, that automation does tend to professionalize the labour force and to upgrade skills.

In their sample city, the number of professional and technical workers had increased at three times the rate of increase in all other cities compared, the number of managers and officials had increased whereas the overall distribution for all cities of like size had decreased, the number of operatives had decreased four times more than in other cities, and there was a 50% greater decrease in the number of labourers.

It is interesting in this connection that Blauner's data on skill distribution neither support this picture nor the conclusions which he himself draws from them. His data (Table 26, p.196) show that the assembly-line-technology, automobile industry had proportionately as many skilled craftsmen and foremen, more semi-skilled workers, and far fewer unskilled workers than the continuous-process-technology, chemical industry. Despite this, Blauner characterizes the chemical industry as one with balanced skills and the automobile industry as one with a low-skill distribution.

Two reports on the effects of the introduction of automation conflict with the rosy picture presented by Foote, Vollmer and Mills, Faunce and Clelland, and Blauner. In a field study of workers in a newly automated automobile plant, Faunce (1958) finds that these workers were more, rather than less, dissatisfied. The high capital investment in the new equipment, and the consequently greater cost of shutdown, made the foremen exceptionally sensitive to the risk of breakdown. As a result, workers were more closely supervised than they had been previous to the new technology. Indeed,

whereas, on the assembly-line, the foremen had tended to play roles of assistance, they now rather stringently directed their workers. Although the plant layout placed workers in definite social groupings, as distinct from the strung-out work stations on the line, the amount of social inter-action between workers was actually reduced. Faunce suggests that this was a result of the closer attention to the work required of the workers, the greater distances between them, and the greater noise of the automated machines. He concludes that under the technological conditions established in this plant, prescriptions about human relations-oriented supervisory techniques were much less relevant than recognition of the intrinsic features of the technology in use.

Hoos (1960) studies the introduction of automated equipment into the white collar clerical world, and concludes that the costs, in terms of work satisfaction and morale, are high. At the clerical level many jobs disappear, not so much in the sense that the work force is reduced appreciably but rather in that output increases without concomitant increases in the size of the labour force. Those new manual functions which are created tend to be more monotonous and uninteresting than those they replaced, and skill levels tend to be depressed. Moreover, the introduction of this equipment tends to reverse the tendency to decentralization of plants and offices, thus necessitating many inter-city transfers, again, a cause of dissatisfaction. At the managerial level, many middle-management jobs dealing with

coordination and scheduling disappeared, with concomitant reductions in the number of middle managers. This heightened the insecurity of those remaining, and closed mobility avenues for many of those below this level. As a consequence of her study, Hoos' conclusions about the benign effects of the introduction of automation tend to be pessimistic.

Blau and Scott (1962, pp.180-188) review some of the other evidence on automation, and make the following conclusion:

> ... as long as automation is not accompanied by a higher level of skill on the part of the workers involved, it does not result in increased discretion for them; hence, job satisfaction is not notably improved by such automation and may in fact be reduced. Given a low level of skill of operators, moreover, the complexity of the machines and the interdependence of operators appear to require closer supervision and greater centralization of decision-making to minimize the costly delays occasioned by machine breakdowns or by imperfect coordination (p.182).

We must therefore differentiate the instances where automation depresses the required skill levels from those which elevate the skill level. It would also appear that more negative consequences stem from the use of the old labour force instead of using workers already accustomed to the new technology (we limit ourselves only to the negative effects on satisfaction). New industries, starting with automation as their only technology, may have an advantage in this respect over older industries which

transform their customary technology. Finally, we should be aware that most of the negative results tend to have been found shortly after the introduction of the new technology, and that the studies cited did not take care to distinguish between the effects of change itself and the particular type of change involved. There is considerable evidence that suggests that it is the mere factor of the change, quite apart from the nature, which operates as a determinant of worker satisfaction, morale, and productivity.

Alienation can be conceptualized as either the lack of positive identification, or as a negative identification, with the work task. March and Simon (1958,pp.76-77) hypothesize the conditions of basic work technology that are thought to be associated with the worker's identification with his task. It will be noted that some of the propositions reflect the intrinsic effects of the technology whereas others use mobility aspirations and mobility opportunities as intervening variables. March and Simon posit that:

> 1) ... The more a particular task is perceived as a training rather than as a terminal job, the weaker the identification with it.
>
> 2) ... Low level tasks ... do induce task identification where mobility is not anticipated.
>
> 3) ... The more a given task reflects a high level of technical skill, the stronger the identification of the individual participant with it.

> 4) ... The more a given task reflects individual autonomy in making decisions, the stronger the identification with the task.
>
> 5) ... The more a given task (involves) the use of a number of different programs rather than a single one, the stronger the identification with the task.

These hypotheses tend to be consistent with the data already presented on the differential likelihood that workers will find satisfaction and meaning in various types of technologies, and with the mixed findings emanating from studies of the consequences of automation. Clearly, skill level, autonomy in decision-making, and the variety of required operations in task performance are related to one another, and each in turn appears related to the type of technology in use.

While Dubin (1958,p.175) agrees that skill specialization and extreme subdivision are concomitants of the technology in use, he is not entirely sure that the consequences of skill specialization are always in the direction of enhanced worker satisfaction and commitment to the type of work. He postulates five possible dysfunctional consequences of skill specialization. We must note, however, that he appears to be discussing specialization by task or machine function rather than the more inclusive type of craft specialization.

1. Commitment to a skill, and the development of expertise in it, results in the reduced ability of the worker to be transferred in the event that the technology changes.

2. More and more emphasis is placed on job training, a factor which March and Simons hypothesize to result in initially low identification with the work task.

3. The emphasis on training induces a tendency to job standardization in order to facilitate that training. By extrapolation, since greater standardization results in less discretion, and since the amount of discretion has been found to be related to satisfaction, greater standardization will likely result in less satisfaction.

4. In skills that may readily become obsolescent, workers themselves may place lower value upon their skill. Again, by extrapolation with the Foote, and Vollmer and Mills data, the intrinsic rewards of strong identification with a skill would not be forthcoming.

5. Finally, where there is a high identification with the skill, the specialist may tend to view his own particular set of operations with undue narrowness. This heightens management's need to increase coordinative activities, thereby making the worker susceptible to more supervisory contact than is strictly necessary when viewed from the perspective of the task itself. By extrapolation, again, work satisfaction has been found to be inversely related to closeness of supervision, and reduced satisfaction may then be a consequence of high skill identification.

We may recall that Faunce's study of automobile workers in a newly automated plant found that, as a result of technological factors, they had reduced opportunities for interaction while working (1958). In turn, interaction opportunities were related to satisfaction with work. Blauner (1964) compared the opportunities for interaction permitted by different technologies, and concluded that they were highest for craftsmen and

continuous process workers, low for assembly-line workers, and lowest for machine-tenders. Walker and Guest (1952) have supported this view of assembly-line workers. Dubin (1958, pp.104-105) neatly classifies the types of work groups necessitated by the technological process.

Apart from the worker who performs his work task in isolation, Dubin states that there are three types of formal work groups theoretically possible. The one which will actually be used is determined by technology. The team group is found when rationalization of the work is low. The team is given the job, the raw materials and tools, the approximate schedule for completion, and itself divides the work among its members. Discretion and autonomy are consequently high. The task group is found in a technology wherein rationalization has progressed to the stage that each worker has a clearly defined job which is his and his alone. However, rationalization is still sufficiently low to allow that workers exercise autonomy over their work operation. Examples of this type of work group are found in Roethlisberger and Dickson (1939) and in Roy (1953, 1954). Finally, the technological group, which is best exemplified by the assembly-line, is the product of a technological process wherein rationalization has progressed to the point that the work stations and work tasks are strictly assigned, and pace is determined by machine. Neither is there much discretion over the manner in which the task is to be performed nor autonomy over pace. Moreover, interaction possibilities are greatly reduced.

Therefore, to summarize, the usual linkage appears to be as follows: Technology determines the type of work group, the amount of worker discretion, and worker autonomy. The type of work group determines the extent to which there can be satisfying interaction opportunities. Discretion, autonomy, and pleasant interactive opportunities determine some of the satisfaction experienced in work.

Let us now leave the relationship of technology to alienation and satisfaction in order to consider some of the other important social consequences that have been found to emanate from technological factors.

TECHNOLOGY AND OCCUPATIONAL SOCIALIZATION

It is now a commonplace finding that the more elaborate and complex the technology is required for given work tasks, the more lengthy a period of occupation training will be required and the more likely it is that the training will be formal. This is reflected in the many statistics which, without exception in the literature we have examined, find high correlations between skill level and years of schooling completed. The correlations are high despite the fact that apprenticeship programs tend not to be counted in years of formal schooling, thereby reducing the relationship to an uncalculated degree. A sample of the high degree of relationship is offered from Inkeles and Bauer (1961,Table 32,p.138) for a Soviet sample.

TABLE 6

EDUCATIONAL ATTAINMENTS OF SOCIAL CLASS GROUPS

Education Attained	Intelligentsia	White Collar Employees	Skilled Workers	Ordinary Workers	Collective farmers & peasants
0 - 4 yrs.	--a	7%	30%	56%	69%
5 - 7 yrs.	7	26	43	33	22
8 - 10 yrs.	22	40	24	11	9
Some College	28	12	3	--a	--a
College Grad.	43	15	--a	--a	0
Total Number of Respondents	557	553	225	382	267

a - less than 1 per cent

Of perhaps greater interest are those studies relating to factors other than the amount of education required by different types of work technology.

One interesting study, conducted by Pearlin and Kohn (1966) compares middle-and-working class fathers in the United States and Italy for the effects of social class and of features of their work upon the inculcation in their children of work-related values. Not unexpectedly, the middle-class fathers in both countries tended to favour self-direction on the part of their children whereas working-class fathers more greatly preferred that their children conform to external prescription. The authors then concern themselves with the unexplained variance, and find that they can account for nearly all the variance in the response patterns by dividing the data on three aspects of father's occupation, the last two of which are clearly technological and the first of which is in many respects a concomitant of technology. The three factors were (1) the closeness of supervision to which the father is subjected, (2) whether he works principally with things, with people, or with ideas, and (3) the degree of self-reliance his job requires.

They found that the degree of support for values related to self-control increases as fathers have jobs not closely supervised, which deal with people and/or with ideas, and which require self-reliance. Those fathers with close supervision, or dealing with things, or not requiring self-reliance tended to give more support to parental values supporting obedience. Despite

an intercorrelation between jobs having related characteristics, the researchers found that each of these job characteristics made an independent and cumulative contribution to this value pattern. Moreover, type of job (in terms of these dimensions) explained almost all of the variance whereas father's occupation (in terms of the standard ranking of occupational titles) explained only a little. The conclusion which we may draw from this study is that given work technologies generate the appropriate norms for either self-direction or obedience, and that these are then passed along to the succeeding generation through parental socialization.

In a review of the voluminous literature on career planning in conditions of pervasive technological change, Slocum (1966,p.43) comes to the generally-held conclusion that one's work life, at whatever occupational level is likely to be interrupted by unforeseen changes in technology. He echoes the generally not yet satisfactorily demonstrated though widely held belief that in a situation of accelerated occupational change accompanied by technological innovation, it is general education rather than specific vocational education which minimizes the possible negative effects of job disappearances and skill obsolescence. (For a compilation of the recent literature supporting this view, see Halsey, Flood and Anderson, 1961, Part 1.) Slocum mentions one other logical consequence of excessive technological change which is also of interest - the heightened difficulty of purposive and rational occupational choice when the available occupations are

in a state of flux - but unfortunately he cites no research evidence to support this contention.

TECHNOLOGY AND SOCIAL MOBILITY

An interesting study by Stone (1953) relates mobility opportunities to the technological production methods used. In a study of 306 managers in four different plants, he divides the production method used into three types - an old style production method is one where skilled workers are in the majority; a mixed production is one in which skilled and semi-skilled labour predominate and a modern method is one which typically uses semi-skilled and unskilled workers. Stone hypothesizes that the lowest mobility rates will be found in the factories with modern production, and that the mixed production method will have the highest mobility rate. His data confirm these hypotheses although there were intervening factors like ethnicity, religion, race and kinship to consider as well.

Blauner's data indicate that workers' expectations of mobility opportunities are conditioned by the predominant technology in their industry (1964, Table 49, p.288). Three quarters of those in the machine-tending textile industry and two thirds of the workers in the assembly-line automobile industry felt that their chances to advance beyond the foreman level were not good, whereas only slightly more than half of the workers in the craft and continuous process industries felt the same way. It is unfortunate that Blauner chose to use expectations of advance beyond the foreman level as his

indicator. Since advances to the foreman level are increasingly dependent on amount of formal education, and since advances beyond that level are even more closely tied to educational level, the response pattern may be more closely related to completed education than to inherent characteristics of the technology. Blauner's description of the mobility opportunities in the continuous process industry is also suggestive of some rather complex relationships between technology, mobility opportunity and satisfaction. Initially there were many openings at higher levels which were filled from those at lower levels within the company. This tended to raise satisfaction level appreciably, but it also had the effect of raising and/or reinforcing the mobility expectations of those still at the lower levels.

Since the promoted workers were happy with their work, and tended not to leave in any large numbers, thereby leaving few openings, the mobility rate dropped at the same time as mobility expectations were still high. This then had the effect of depressing satisfaction for the lower level workers, who became impatient and frustrated by the slowness of their own advance.

Slocum (1966, p.173) cites a study by Broom and Smith (1963) in which it is suggested that certain occupations provide experience which facilitates easy movement from one occupation to another. The implication here is that intrinsic features of the work build up skills and abilities that are readily portable from one occupational sphere to another. Such occupations

are called "bridging occupations", and Broom and Smith believe that among the occupations of this type are butler, soldier, school teacher, peddler and professional athlete.

TECHNOLOGY AND INFORMAL POWER

Both Dubin (1958) and Crozier (1964) examine the relationship between technology and the opportunity to achieve informal power without any necessary change in formal position. Each defines power somewhat differently, but ends with a description of an essentially similar process.

Dubin (1958, pp.63-64) treats power as the potentiality for disruption of integrated work flow that is attendant on a complex technology requiring a high degree of interdependence. When the work of any employee is a precondition for the work of other workers at different stages of the productive process, then a certain amount of power resides in that employee. In this sense, almost all employees in a complex, yet not automatic, productive process have power. An excellent example of the utilization of opportunities inherent in the division of labour may be found in Roethlisberger and Dickson's description of the Bank-Wiring Room, (1939, pp.487-492) in which the wiremen and soldermen were able to capitalize on the fact that correct sequencing of different operations required their cooperation. When they wanted to show their opposition to one of the inspectors, they withheld this cooperation to the point of making it impossible for him to do his job and ultimately resulting in his permanent withdrawal from the workroom. However,

Dubin did not point out that amount of power possessed by any one worker is related to his vulnerability to sanction and to his replaceability. Therefore all the separate factors determinate of these - his degree of skill, his protection by the union, the availability of others who might replace him, etc., serve as more important determinants than technology alone in accounting for the worker's ability to garner informal power to himself by virtue of his place in the division of labour.

Crozier (1964, pp.156-174) treats opportunities to attain informal power as deriving from the amount of uncertainty surrounding the work performance of any employee. That is, the less other workers are able to predict the behaviour of a given worker, the more power has the latter over the former. Some of this uncertainty is related to a worker's functional autonomy and his ability to exercise discretion, and much of this is formally built into the hierarchy and represents formal rather than informal power. But, Crozier continues, those workers who can relate to the technological process in ways which others cannot sufficiently understand so as to predict their behaviour have the opportunity to translate the co-worker's inability to predict into power opportunities for themselves. In the tobacco factories studied by Crozier, the maintenance workers were able to surround their work function with this sense of mystery, and therefore enjoyed informal power far in excess of that accruing to their formal rank. The power of the expert is therefore to be accounted for by the fact that the expert is the

person for whom uncertainty tends to be minimal. However, this source of power may be self-limiting in that the expert's own success tends to reduce the uncertainty. Therefore, one may be left with the paradoxical finding that the better his role is performed, the less uncertainty, and therefore, the less informal power.

In an approach somewhat analagous to that of Crozier, Carlin (1962) looks at the degree of certainty embodied in legal technology, and the consequences of variation in certainty for a variety of career contingencies. Carlin divides a sample of sole practitioners and small firm lawyers in Chicago into lower and higher-level lawyers. Lower-level lawyers are those whose "practice consists largely of a bookkeeping operation, seldom going beyond the filling in of a standard form or a rare time appearance before court or agency". Higher-level lawyers are those whose practices require higher skills in that the work intrinsically is unstandardized and non-routine. Lower-level lawyers are far more subject to competition than are the higher-level lawyers, a perhaps natural consequence of the routine nature of their work which makes the services of one practitioner readily substitutable for another. Moreover, among lower-level lawyers, those with specializations in real estate and corporate work are subject to a high degree of competition from non-legal sources - real estate brokers, mortgage companies, banks, and trust companies; those with specialization in personal injury are not subject to much competition from non-lawyers but the

competition from other lawyers is very high. Among higher-level lawyers, only those in real-estate and business-corporate fields are required to make much use of their high technical skill. For higher-level lawyers in personal injury, tax and divorce specializations the skills more important than technical expertise are those related to business-getting and institutional manipulation. For these men, while the work intrinsically demands high technical skill, these need be augmented by market skills.

TECHNOLOGY AND THE ORGANIZATION

It is generally accepted that while organizational structure is not completely dictated by the technology in use, technological considerations set the boundaries within which the structure is free to vary. No lengthy exposition of how schools require classrooms, teachers to man them, a standard curriculum, etc., etc., is necessary to demonstrate the linkage between a given work task, the technologies available to perform it, and the structural forms in which the performances are embedded.

Bell's summary point even though it refers primarily to industrial organizations, is sufficient.

> The contemporary enterprise was set up to obey three peculiar technologies: the logic of size, the logic of metric time, and the logic of hierarchy. (The logic of hierarchy is dictated not only by the technological division of labour but by size as well.) Each of the three, the product of engineering rationality, has imposed on the worker a set of constraints with which he is forced to wrestle every day. These condition the daily facts of his existence (1962,p.230).

In a unique and widely acclaimed study, Joan Woodward demonstrates the efficacy of an organizational structure which is congruent with manufacturing techniques. Using commercial success as her criterion of effectiveness, Woodward concludes that different technologies impose different kinds of demands on individual organizations and that these demands have to be met through an appropriate structure. Success accrued to those firms in which form and function were complementary (1958).

Wilensky (1956) discusses the consequences for labour unions of adding to their staffs sets of technical experts, each with a specialized technology. One class of expert - the Facts-and-Figure-Man - was essentially composed of the social science and business researchers whose work became required by the union as the collective-bargaining process became more complex. Their participation in the union has several important consequences for the organization. First, it tended to introduce a strain of rationality and responsibility into the strategy of union negotiators and tended to make their approach more conservative. In this respect the organization was "professionalized" in that technical expertise became one of the criteria of strategy and policy-making. Several consequences at the rank and file level were also observed; the prestige of the leadership was enhanced, morale about collective bargaining prospects was increased, and fringe benefits, dependent on technical arguments, were often won. However, when the facts-and-figure men owed more allegiance to the judgements of their

discipline than to the strategic desires of the union, certain dysfunctional consequences were likely, particularly insofar as the issues at the bargaining table were more highly determined by the relative power of the parties than by the strength of the technical arguments (pp.52-60).

Another type of technical expert - the Contact Man - has been necessitated by the needs of unions to maintain and use contacts with a variety of agencies and organizations in the non-union world. These experts are usually politicized lawyers or public relations men. Wilensky discusses the consequences of their activity for the organization. At the level of the union leadership, a "beat-the-game mentality" is introduced so that union leaders tend to think that all clashes of interest can be "fixed" or smoothed over. This tends to mitigate the "rational responsible bias" introduced to the organization by the use of facts-and-figure-men. Another result is that union leaders are placed under constraint to live up to the public images provided for them by the contact-men, and that this need to cultivate good-will induces some tendencies to "play it safe". To the extent that the imagined policies are non-existent or uninterested, this may be an unrealistic or unnecessary constraint, and hence this consequence might be dysfunctional. Wilensky concludes that, on balance, the direction of the Contact Man's influence on the organization is toward the "beat the game", "cut the red-tape" bias (pp.78-79).

The last type of technical expert discussed by Wilensky is the Internal Communications Specialist, the professional writers, editors, and speakers who are used primarily to address the rank and file on behalf of the organization. The functions attendant on their use tend to be the support and buttressing of top officer prestige and authority, the promotion of manipulative leadership styles to replace coercion, and the diminution of the expression of organized dissent as a result of partisan monopolization of communication channels (pp.102-103).

The major summary point to be made in connection with this material is that as the technological requirement of unionism became more elaborate, technically competent experts were engaged to fulfill these needs, and as a consequence, helped to change certain aspects of the organizational structure. As Wilensky concludes,

> The function fulfilled by all types - short of buttressing top leader power and prestige - must, indeed, work in the long run to suppress radical tendencies pushing up from below. The "civilized" bargaining style promoted by the Facts and Figures operation, the smoothing, fixing and expediting contributions of the contact man - these inevitably work toward the motivation and accommodation of conflicting union and non-union interests. They further the integration of American labour into the complex bureaucratic machinery of a private enterprise economy and a pressure group policy. Any worker disaffection that may result from this trend will result in increasing employment for Internal Communications Specialists, whose propaganda and group work skills are indispensable in the transformation of discontent into loyalty, opposition into properly constructive participation (p.106).

From our perspective, the organizational roles played by the experts, to use Parsonian terms, are as follows: fact-and-figure-men play goal attainment roles, contact men play short run adaptive and long run integrative roles, and internal communications specialists play pattern-maintenance roles.

II ORGANIZATIONAL STRUCTURE

We do not propose to elaborate or to make any additions to prevailing theories of organization. Indeed, the organization is our unit of analysis only insofar as its states are determinant of our main concern - work-related behaviour and work attitudes. Most of the literature to be reported will consider structural features of the organization as independent variables; at times other structural features may be treated as dependent, but only in those cases where they are part of causal chains the final link of which is behavioural or attitudinal. The sections into which we subdivide the material are chosen for convenience only, and many contributions could as easily be accommodated in sections other than the ones we have chosen to place them.

THE FORMAL ORGANIZATION

The literature is replete with references to the formal organization as it is officially designed, with its legally designated set of positions, channels of communication, lines of authority and decision-making, formally assigned work tasks, and so on. There is a general consensus that no organization operates in fact as its formal design would indicate and it is customary to designate those patterned, stable, and recurrent deviations from the official design as the informal organization. Sociologists, particularly those who follow the structural-functional theories, have appeared more interested in the informal, as compared to the formal, structure and were

this a paper on organization theory, the citations would be overwhelmingly weighted in this direction. Still, we must introduce consideration of the formal organization since its structure sets the boundaries of all the behaviour encompassed therein.

Slocum (1966, pp.46-49), following the Parsonian model, describes work organizations as comprising the following structural elements: (1) Organizational Relationships - the network of regular and predictable relationships among the members of the organization; (2) Positions, or status-roles, which are hierarchically arranged, functionally specified, and for which the respective duties and obligations, rights and privileges are detailed; (3) Boundaries - the points in the work system where members are differentiated from non-members, and which usually have a spatial referent as well; and (4) Organizational Sub-Culture which includes the history, rules, sanctions, values and goals, and which provides guides to organizational members for behaviour appropriate to the given work setting.

When these elements become formalized in the following manner, we speak of the ensuing formal organizational structure as a bureaucracy. Bureaucracies have:

1. Fixed and official jurisdiction areas, which are regularly ordered by rules, that is, by laws or administrative regulations
2. Principles of hierarchy and levels of graded authority that ensure a firmly ordered system of super-and-sub-ordination in which higher offices supervise lower ones

3. Administration based upon written documents; the body of officials engaged in handling these documents and files, along with other material apparatus, make up a "bureau" or "office"

4. Administration by full-time officials who are thoroughly and expertly trained

5. Administration by general rules which are quite stable and comprehensive (Presthus, 1965, p.5, cited directly by Slocum, 1966, p.60)

Dubin (1958,Chap.4) divides the work organization into technological, formal, non-formal, and informal behaviour systems. The formal behaviour system is the one which specifies the minimum conditions of acceptable membership in the work organization and sets forth the broad rules, regulations, and procedures governing conduct and behaviour while at work. Its functions are to specify the organizational goals and the range of permissible choice of behaviour to achieve them, the rules of personal conduct, the duties and responsibilities of the individual to the employing organization, and the concrete values expected of all members. It is through the formal behaviour system that the organization's authority relations are legitimated.

One's position in the formal behavioural system is one of a set of hierarchically arranged positions. Dubin divides the hierarchy into three separate status ranks - jobs, positions, and offices - and each rank is a function of variable values on tasks, duties, responsibilities, rights,

obligations, and privileges. Generally as one moves from jobs, through positions to offices, there is a shift (1) in task from technological to authority elements, (2) in duties from mere contractual commitment to high intellectual and moral commitment, (3) from minimal responsibilities and being under high degrees of external control to ultimate responsibility and being under self-control, (4) from uniform use of rights to great discretion in the use of greater rights, (5) from fewest to most performance obligations, and (6) from fewest to most privileges. Whether the rank is a job, position or office will determine the ease with which it will be filled, the criteria used to fill it, and the amount of allowed or expected initiative from the incumbent (1958,Chap.5).

Simon (1944) defines the formal organization in terms of the rationally-devised plan through which decision-making, at each level, will be most rational, efficient, and effective. The making is an arrangement whereby decisions made about ends at any one level constitute the accepted premises at the next lower level. Discretion should be given in choice of means but not in choice of ends. Simon suggests that the individual worker can be successfully influenced in at least five ways to behave rationally: (1) authority, (2) identification, (3) the criterion of efficiency, (4) advice and information and (5) training. Since these are, to a large extent, interchangeable, the successful formal administrative structure will choose the most efficient and effective means for the given circumstance. Two

processes of decision-making - planning and review - are important to the administrative structure, but whereas planning always implies greater centralization of authority, review permits either centralized or decentralized decision-making.

Gross (1965,p.10) suggests that the way in which labour is divided depends on more than the authority structure and on the "rational" division of the work. Moral considerations overlay a set of culturally prescribed, particularistic dimensions as well. The limits of organizational pervasiveness may, for example, be rooted in the nature of the national society so that, for example, the Soviet worker is not related to the work organization in as contractually circumscribed a way as the American worker. The pervasiveness of the formal organization, or to use Etzioni's term, its "embrace", will be determinate of a particular authority structure designed to maximize effectiveness.

Finally, Dalton (1959) can be used as an illustration of an argument put, in varying degrees of agreement, by Roethlisberger and Dickson (1939), Selznick (1949), Gouldner (1954), Blau (1955), Strauss et al. (1964), and myriad others, that having explained the extent to which the formal organization is determinate of worker-behaviour and worker-feelings and attitudes, one is still left with the task of accounting for all the patterned, stable and recurrent deviations from the organization as "it is designed". Dalton's statement is a sophisticated description of the organization as "it is":

> Organizations are systems of formal roles that direct and shape role occupants. Roles never coincide perfectly with players. At times the system must alter roles and manipulate occupants to preserve itself. Personal sentiments encourage and maintain distortions. While appearing to respect the ethics of his group and of the organization, the occupant must be able to take multiple informal roles, and to deal with those of others while preserving the essentials of his chartered role. Through personal endorsement and aid from others, the strong occupant shapes his role as it guides him, as against the weak occupant who offers only minimum aid to his role.
>
> In variously compromising its ends, the organization forces role occupants to assert, compromise, their innately human purposes (1959,p.259).

BUREAUCRATIZATION

As noted above, it is a characteristic of certain work organizations that they are highly bureaucratized in their formal design of structure, routines, and procedures. Weber, the father of the theory of bureaucracy, held that the conditions of effective performance of an organization's lower level participants are: a money salary connected with the opportunity for a career not dependent upon accident or arbitrariness; strict discipline and control dependent not only upon rules but also on the development of a sense of honour and of prestige sentiments; the development of status group sentiment; and forms of impersonality at work which support the formal separation of the work life from the non-work life (Weber, in Gerth and Mills, 1958,p.203).

Hall and Tittle (1966) find that the five correlates of bureaucracy are impersonality of operation, hierarchy of authority, division of labour, specificity of procedures, and complexity of rules, and that these items form a Guttman scale, - that is, if an organization is found to have highly complex work rules, the four preceding items will also be present. Treating these items as variables, they postulate that the higher the values on the variables the more bureaucratized will be the organization. A moderately strong association was observed between the degree of bureaucratization and organization goals concerned with objects rather than ideas. Less association was found between degree of bureaucratization and organizational size, the number of departments or divisions in the organization, the nature of the official organization goals, or the extent to which the organization is people-oriented.

Stinchecombe (1959) holds that Weber's ideal type includes items purported to be intercorrelated in <u>any</u> system of rational organization, but which are not, in fact, invariably present. He points out, on the basis of his comparison of mass production and construction industries, that bureaucracy <u>and</u> professionalization of labour are alternative ways to achieve rational administration. Each mode of organization fulfills the requirements of rationality which are (1) the separation of work position from household, (2) the allocation of work on the basis of competence and (3) pecuniary compensation regulated by the status of the worker. But bureaucratic

organization goes beyond the minimal demands for rationality by emphasis on: (1) the development of the files and employment of clerks, (2) hierarchical command, advice, and authority structures, and (3) career commitment to an organization rather than to an occupation. Stinchecombe posits that craft-organized industries do not require these elements for rationality since the professional socialization of the work force gives the workers sufficient understanding and commitment to appropriate values to ensure efficient and effective performance, integration of effort, and co-ordination. Furthermore, the variability in volume of production and of product mix would make the bureaucratic elements irrational for the construction industry, the craft organized industry taken as his example.

It is interesting that Weil (1952, pp.73-78) considers the very factors thought by Weber to induce greater effectiveness among the lower level employees to produce worker rootlessness, or alienation. Weil's program to reintroduce rootedness for the working man can be read as a direct elimination of the criteria used by Weber to define bureaucracy. In this connection, it may be recalled that Weber regarded bureaucracy not as a threat to man's rootedness but to political democracy.

Wilensky (1956, p.276) in his study of labour unions found that there were strong tendencies which slowed down the rate of union bureaucratization. These were: (1) entrenched traditions of patrimonial and charismatic leadership, (2) political and nepotistic recruitment, (3) the absence

of regularized salary structures, tenure systems, and promotion procedures, (4) the employment of many experts with non-bureaucratic role orientation, (5) the high influence of the least bureaucratized experts, (6) an all-pervasive anti-intellectualism, (7) imperatives toward personal loyalty and "pro-labour" attitudes, (8) a recurrent atmosphere of crisis and (9) a demand for organizational flexibility.

The consequences of the low degree of union bureaucratization were: (1) greater objective success in goal achievement (asserted but unsubstantiated), (2) a low degree of autonomy for employed experts, (3) fluid and loose lines of influence and authority, (4) minimal application of criteria of formal training for purposes of recruitment, (5) non-permanent tenure for employed experts and (6) greater career success for non-bureaucratic types. Moreover, the flat pyramidal rank and authority structures left small room for promotional or salary advancement (1956, pp. 243-258). Greater objective success in goal achievement is thought to be the result of the greater flexibility and the lesser pressure for conservation, overconformity, and technicism that are associated with low degrees of bureaucratization (p.278).

Crozier regards bureaucratization not as a rational and efficient means of goal achievement but as an organizational aberration, a vicious circle wherein dysfunction is productive of yet more dysfunction. The vicious circle comes about as the result of the interplay of (1) impersonal

rules, (2) centralized decision-making, (3) isolation and high social distance between social ranks, and (4) the emergence of parallel power relations. He offers the following propositions:

1. The greater the elaboration of impersonal rules, the less the operative relevance of superior - subordinate relationships (compare Gouldner, 1954).

2.(a) The greater the desire for impersonality, the greater the pressure for centralization.

(b) The greater the degree of centralization, the less the opportunity to exercise discretionary power.

3.(a) The greater the degree of impersonality and centralization, the more complete will be the isolation of each stratum from other strata.

(b) The greater the isolation of any stratum, the greater will be the pressure of the peer group.

(c) The combination of impersonality, centralization and isolated strata gives rise to ritualism.

4.(a) Power relationships will develop around those few areas of uncertainty which exist.

(b) The fewer the areas of uncertainty, the more power will be generated in those areas of uncertainty which do exist.

(c) The more narrowly regulated is an organization, in terms of impersonality, centralization and strata isolation, the greater will be the independence of the experts who deal with uncertainty (1964, pp.187-193).

By introducing a psychological premise similar to that implicit in Dalton (1959) and Strauss et al. (1964), that there is an active tendency on the part of any human agent to take advantage of present opportunities to

resist interference and manipulation and to further one's own privileges, Crozier extends the relationship between rules and close supervision discussed by Gouldner (1954) and specifies the vicious circle pattern as follows:

> ... the rigidity of task definition, task arrangements, and the human relations network results in a lack of communication with the environment and a lack of communication among the groups. The resulting difficulties instead of imposing a readjustment of the model, are utilized by individuals and groups for improving their position in the power struggle within the organization. Thus a new pressure is generated for impersonality and centralization, the only solution to the problem of personal privileges (1964, p.194).

It is for this reason that Crozier holds that bureaucratic organizations can only change by the imposition of a solution after a major crisis, and that the accumulated pressure of the vicious circle is what finally induces the crisis.

Unlike Merton (1958, pp.139-157) who tends to treat ritualism and rebellion as deviant modes of adaptation to the disjunctiveness between the organization's goals and its institutionalized means for goal achievements, Crozier treats these adaptive modes as rational personal responses in the struggle for and against power. Retreatism is the typical response to an overdemanding situation in which there is no expectation of significant rewards. In situations where the rigidity of the organization is increased, one should expect increases in retreatism. Innovation emerges

with power, and is properly the role of those who achieve power. Finally, Crozier (1964, pp.198-204) postulates the "practical-conservative" type, the one who accepts organizational goals and means, but chooses to use power rather than inappropriate rules for goal achievement. Dalton's (1959) managers would appear to be correctly labelled "practical conservatives".

Rushing's study of a psychiatric hospital leads him to one conclusion quite opposite to that of Crozier. Whereas Crozier viewed increasing bureaucratization as increasing the opportunities of experts to attain informal power, Rushing suggests that increasing bureaucratization - in the sense of increased formalization of rules, relationships, and procedures - successfully structures out power-attainment opportunities (1964, pp.245-246). Part of the difference may be accounted for by Crozier's association of power with the technological ability to control uncertainty whereas Rushing relates it to the externally validated status differences between professional groups in a situation of low differentiation in technological skill. Rushing also relates degree of bureaucratization to the type of power strategies that lower-status groups will adopt. In institutionalized bureaucracies where relationships are traditionally-rooted, maintaining strategies will be used, while in new organizations, with undeveloped mutuality in the social relationships between different functional roles, implementing power strategies will predominate. As mutuality develops, the organization becomes more bureaucratized (pp.243-245).

Smith and Levinson associate the development of a maintaining structure, and greater bureaucratization, not so much with the growth of mutuality between different professional groups in a mental hospital as with the mere persistence of the organization over time, and the vested interest the organization develops in its own survival. However, the co-existence of varied professional groups within the same setting raises problems the solutions of which tend to be debureaucratizing for the organization. Among these problems are: (1) the reconciliation of the administrative structure with the informal status hierarchy, that is the differences between scalar authority and functional authority, (2) the solution of communication problems brought about by professions based on different training, education, and value premises, (3) the need to reconcile professional goals and organizational goals and (4) the need to reconcile the divergent tendencies toward professional individualization and bureaucratic standardization of client service (in Greenblatt, Levinson and Williams, 1957, pp.3-8).

Clark (in Vollmer and Mills, 1966, pp.3-8) also addresses himself to the degree of bureaucratization brought about by the co-existence of different professional disciplines in a university. As the American college moved from a small, unitary and homogeneous unit to a large, composite or federal structure, from single to multiple value systems, from nonprofessional (i.e., generalized) to professional (i.e., specialized) work, and from collegial consensus to bureaucratic organization, the bases for faculty organization

have changed. Departments and other sections are now so large and numerous that university government tends to be on a representative delegate basis. Clark hypothesizes that:

> ... where professional influence is high and there is one dominant group, the organization will be integrated by the imposition of professional standards. Where professional influence is high and there are a number of professional groups, the organization will be split by professionalism (p.288).

It is interesting that Rushing's data on the psychiatric hospital support the exact opposite of these hypotheses, but the difference may be because university - based disciplines are, at the institutional level, formally equal in rank. Clark treats the federated form of university structure as having professional authority as its dominant form with subsidiary collegial and bureaucratic elements (p.291).

Finally, in an assessment reminiscent of Weber's ideal type, Slocum (1966,p.67) accounts for the high record of professional accomplishment in the United States Federal Service by its high standards of recruitment, its rewards on the basis of competence, its protection of the professional from capricious dismissal, and its offering incentives to the professional regarding Federal Service as a career.

ORGANIZATIONAL TYPES

While there are many typologies of organizations, not many are useful indicators of the behaviour and attitudes of the organizational

participants. We shall restrict our attention to several reports of organizational types as determinants of the independent variables in which we are interested.

For example, Gross (1965,p.112) reports that labour unions can be classified under five types, each a function of its goals and values, and each determinate of different modes of behaviour and different constellations of attitudes for its participants. These are business unions, uplift unions, revolutionary unions, predatory unions, and dependent unions.

Goffman (1961) defines the "total organization" as being characterized by a caste-like separation between its higher level and lower level participants, and by block handling, complete regulation, and complete regimentation of the lower by the higher level (pp.5-6). There is normally only a small supervisory staff, a consequence made possible by the high visibility of the lower participants and their regimentation (pp.6-7). Finally, total organizations tend to have "echelon" types of authority structures wherein anyone at a higher level has authority over anyone at a lower level (pp.41-42).

Etzioni (1961) divides organizations into three categories - coercive, utilitarian, and normative - based on the typical use of power by the higher participants and the typical pattern of compliance by the lower. This classification is used to predict whether the involvement in the organization will be negative (alienated) or positive (committed), and also to

explain the relationship between member responses and organizational sanctions. Utilitarian organizations - most work organizations, according to Etzioni - normally require formal socialization in terms of their instrumental activities, and rely on informal relationships to achieve expressive socialization (1961,p.145).

Slocum (1966,p.231) regards work organizations as ranging from closed to open social systems. Closed systems are those which have a distinctive ideology and a pattern of close social relationships. In such organizations, it typically takes a longer time for a new member to be accepted, and socialization into the organizational culture therefore takes longer.

Dornbusch (1955) divides the American military services into combatant and non-combatant. The Coast Guard, a non-combatant service, is found to be more highly bureaucratized. Dornbusch studies the Coast Guard Academy. He found that unlike the academies of the other services, the Coast Guard Academy helps prepare its cadets for a bureaucratic career by de-emphasizing charismatic elements in their training, and by pointing cadet expectations in the direction of bureaucratic rewards.

ORGANIZATIONAL SIZE

The size of the organization is often thought to be correlated with particular outcomes for organizational structure. We do not wish to pursue all the possible concomitants of size, but we will cite several works which attempt to relate it to the degree of bureaucratization.

Mason Haire (1959), in looking for a theoretically useful biological analogy to the process of organization growth proposes that the points of greatest growth occur at the points of greatest stress. For example, organizations experiencing stress from their environment will grow in the ratio of staff handling outside functions as against staff handling inside functions. Administrative staffs grow when the stress is created by needs for coordination, integration, and planning. In Haire, then, change in organizational size is particularly important, for the areas of growth enable analysis of organizational stress. His theory has not been generally accepted, and his critics, while they admire his rigour, find that it is achieved by holding constant factors which empirically tend to show the greatest degrees of variation.

It was generally believed that large size was productive of bureaucratic forms of organization. We may recall that Hall and Tittle found a low degree of association between size and bureaucratization (1966). Terrien and Mills (1955) use the proportion of staff given over to the administrative component of the organization as an index of bureaucratization. They hypothesize, with support from their data on school districts, that the greater the size of the organization, the greater will be the proportion of workers in its administrative sector. Anderson and Warkov (1961) attempt to test the same hypothesis in veterans hospitals specialized in the treatment of pulmonary diseases. Their data indicate quite the reverse of the Terrien

and Mills study. They found that in hospitals with identical levels of complexity in operations, the greater the size, the smaller the proportion in administration. They postulate, and demonstrate with data from a control group of general veterans hospitals, that it is complexity of operations - the fulfillment of different functions which need coordination - that is determinate of administrative expansion. That is, the Anderson and Warkov finding is that the greater the complexity of operations the greater the proportion in administration, and the greater the size without growth in complexity, the smaller the proportion in administration. In some respects, the data used in both studies are somewhat suspect. Terrien and Mills applied their hypotheses to school districts, and not to schools. The important determinant might therefore be not the size of the school district, measured in number of students, but the number of schools in the district. If this is the case, then the Anderson and Warkov hypothesis concerning complexity gets added confirmation. The Anderson and Warkov study is itself subject to the possibility that increases in the proportional size of the administrative staff might be found not in the hospitals under study but in the divisional bureaucracies that oversee the veterans hospitals.

Smigel (1964, pp.345-346) suggests that up to a certain point size may be related to the bureaucratization of the administrative structure, but that beyond that point increments to size appear to make no further difference. In his study of law firms, he found that smaller firms tended to

imitate the administrative structures of the large firms. Even more important than size in determining administrative structure was the nature of the firm's clientele, that those with a few very large corporate clients had the more bureaucratized forms of organization, and those with many and smaller clients had less bureaucratized organizations.

ORGANIZATIONAL REWARDS

Hart (1949,pp.60-61) describes the situation of union leaders at the local level when the bargaining and contract administration tasks have been taken over by leaders at the national level. The major task left to the local leaders is the administration of union welfare services to the local's membership. Since these services are regarded as rewards by the members, and since the local leaders become highly associated with their control and dispensation, incumbent officers have a great political advantage when seeking re-election. An additional advantage accruing to the union leaders who control rewards is that they enjoy better relations with management since management is generally pleased that the union dispenses welfare services to its membership.

Hart raises another issue related to the question of rewards. The provision of welfare services requires the recruitment of a service staff, adequately trained in their fields. But because the tenure of the professional is dependent upon the annual re-election of the slate of officers who hired him there is never more than a one year guarantee of continued employment.

The lack of security as a reward makes better trained professionals unwilling to accept union employment, causing the unions to hire lesser trained or untrained persons. As a consequence, the quality of service is below the standard desired by the union.

Strauss and Rainwater (1962, pp.107-110) consider the consequences of different evaluative criteria applied to income level as a reward. The chemists in their study appeared satisfied with the absolute pay level they received since the amount normally allowed life at a reasonably high standard of living. However, when they were asked how satisfied they were with their pay level relative to their training and experience, the reports of satisfaction dropped off sharply. To be adequately rewarded, the chemists demanded incomes commensurate with and symbolic of their instrumental contributions.

Of perhaps even greater interest were the Strauss and Rainwater findings on reactions to promotion, and to the reasons for which promotions were given. Promotions were not valued in and of themselves; they were highly valued only when thought to be awarded on the basis of universalistic criteria - competence and scientific achievement; they were much less highly valued if it was thought that they were based on particularistic criteria - political skills, sociability, and the sponsorship of friends. Moreover, those chemists who felt they worked with people who fully understood their function, and the level at which it was performed, felt rewarded, while those who did not, felt deprived of a source of work satisfaction (1962, pp.116-123).

Clark (in Halsey, Floud, and Anderson, 1961) applies Goffman's concept of the "cooling-out" function to junior college reactions to student failure. Rather than treat the phenomenon of low academic performance as a situation which should call forth negative sanctions, the academic organizations institute a set of mechanisms which support the student and manipulate him into a downward (and perhaps more realistic) revision of his aspirations. Rather than withhold rewards, the junior college helps the student into a program where rewards can be more easily attained.

The line of reasoning offered by Goode (1967) is generally related to Clark's point. Normally, work organizations are regarded as rewarding competence and penalizing ineptitude. Goode suggests that, in fact, a great deal of organizational protection is offered to the inept, and that many positive consequences flow from this. However, protection of the inept does have the consequence of somewhat retarding the extent to which the most competent can be rewarded. Notwithstanding this, Goode suggests that the consequence for the organization of not protecting its inept would be more dysfunctional than the consequences of both giving them protection and utilizing them efficiently.

Crozier also views the bureaucratic system of work organization as ensuring a high level of protection. He states that while, formally, the bureaucratic organization espouses achievement and competition for position, the institutionalization of competition, its separation from the daily life of the

work environment, and its formalism have placed within the bureaucracy a protective value analogous to that found in ascriptive societies. Crozier makes the judgement that the consequences for the individual are negative, that security has been achieved at the cost of a loss in personal realism, and that this results in a "secondary kind of anxiety". This, however, is asserted, not demonstrated (1964, p.208).

Goldner (1965) again in an analogous argument, suggests that where demotion is used as a negative sanction, some organizational means still has to be found to maintain a continued motivation to participate. The negative sanctions have, therefore, to be made socially acceptable. The organization accomplishes this by clothing the demotion in a veil of ambiguity. The result is, however, that the criteria for advancement become as vague and ambiguous as those for demotion, and therefore, rewards lose some of their saliency. The ambiguity itself is a product of several factors: the frequent lateral and zig-zag movements of personnel makes it difficult to know whether one has been promoted or demoted; the growth in company size and the shifts in company structure make lines of authority and the nature of the hierarchy less clear; and, as suggested by Dalton (1959) as well, the euphemistic titles given to many positions makes their functional importance and scalar rank difficult to discern.

Dalton (1959) makes several important additions to our understanding of organizational rewards. He augments our understanding of

the protection of the inept as a present reward for past contributions. He provides many illustrations of the importance of particularistic, ascriptive criteria in the winning of rewards supposedly reserved for achievement on the basis of universalistic standards. Finally, he offers a full treatment of illegimate rewards, suggesting that while they are sub rosa they are nonetheless still made available on the basis of organizational goal achievement and tend to complement the official reward structure.

Wilensky suggests that in as yet un-bureaucratized unions, with their charismatic and patrimonial leadership structures, rewards are offered for personal loyalty to the leader. The successful career of the expert rests primarily on his relationships with the leaders (1956,p.277).

Kornhauser (1952), also in a union context, studies the interplay of rewards in the sponsorship of Negroes into official union offices. The sponsorship occurs in unions (with large numbers of Negroes) which are facing a conflict. White leaders recognize the expediency of symbolic leadership as a means of meeting the conflict. The sponsored Negro official is expected to reward his sponsors by playing a symbolic role, unless, of course, he is willing to become a specialist in servicing Negro members only.

Finally, Roy (1952) treats restriction of output as a direct function of the perceived justice of a given rate in a piece work pay system. "Quota restriction" is the control of output after the worker has "made out",

i.e., produced the maximum number of units thought "safe". Safety is interpreted as that level below which management will regard the job as so easy that it will reduce the piece work rate. "Goldbricking" is restriction of output when the rate is regarded as so poor that the workers cannot earn in excess of the hourly pay rate, and hence, cannot earn their bonus. The attitude is described by Roy as one of indifference to high productivity when only the hourly rate is being earned. For Roy's workers, the most important rewards are economic, and he describes them as shrewdly and rationally calculative in their assessment of the economic rewards.

INVOLVEMENT IN THE ORGANIZATION

In this section we limit ourselves to reporting some of the theoretical work of Etzioni (1961) for whom involvement patterns are the major outcome of organizational power and compliance structures.

The analytic dimensions of involvement of lower participants in an organization can be specified in the following way. The nature of the involvement is answered by its direction - positive or negative - and its intensity - high or low. The degree of subordination to organizational power can be answered by the extent of control in each area of control, the range of areas in which the subject is subordinated, that is, the scope of control, and the amount of performance required from the participants (pp.17-20).

Given this scheme, Etzioni holds that organizations which use coercive power elicit highly alienated responses, with the areas of

subordination being of large scope, and with typically low performance obligations from the participants.

On the other hand, employees in work organizations participate for economic rewards, and can be termed as having a calculative involvement pattern. The involvement may be positive or negative in direction but at low levels of intensity. Subordination is medium in extent but narrow in scope. Performance obligations tend to be high.

Etzioni considers schools to be normative organizations in the sense that the involvement pattern is based neither on coercion nor calculation of extrinsic gain but rather on normative or moral terms of compliance. However, to the extent that any school may be unable to manipulate normative controls effectively, coerciveness may be used as a secondary pattern. And further, to the extent that any school uses coercive compliance as its secondary pattern, to that extent there will be alienated responses from the lower participants (p.45). To the extent that vocational schools have custodial goals, there will be a coercive compliance structure, and therefore alienated responses (pp.47-48). In this connection, it is interesting that Coleman, who like Etzioni sees ineffectiveness in the structure of normative compliance in schools, suggests that introduction of calculative, utilitarian compliance patterns - for example, paying students salaries based on performance - as a better alternative to the use of coercive compliance patterns.

Etzioni subsequently provides an even more detailed specification of how the lower participants may be involved in the organization. He suggests that organizations with high scope - defined as the extent of involvement in the organization - and high pervasiveness - defined as the extent to which the organization sets norms even for activities conducted outside it - tend to "embrace" their participants. A specific proposition emerging from these concepts would be as follows: the less the individual participates in collectivities external to the organization, and the more the organizational norms cover even these activities, the greater the extent of organizational embrace (p.160).

Saliency is defined as the importance for the individual of organizational involvement. Generally, the higher the scope, the higher the saliency. However, whereas high scope and the assignment of expressive tasks make for high saliency, high scope and assigned instrumental tasks imply low saliency. Etzioni suggests that high scope and high saliency create problems for the organization in tension management since it is difficult to see where tension levels can be safely ventilated (pp.162-163).

Etzioni suggests that the introduction of concepts like scope and pervasiveness may necessitate a revision in Goffman's notion of the "total organization". According to Goffman, total organizations are both broad in scope and highly pervasive. Etzioni suggests that there are two types, both high in scope, but one high and the other low in pervasiveness. Nunneries would be of the first type; prisons of the second (p.164).

Finally, it is suggested that utilitarian organizations - that is, work organizations - typically have narrow scope and low pervasiveness. It is also suggested that the broader the scope of schools, the more effective the socialization (pp.165-168).

RANK AND AUTHORITY STRUCTURES

It is a characteristic of most work organizations that the lower participants' presence is the outcome of an agreement between the lower and high levels as to the terms and conditions of employment. The contract, plus the formal organizational structure, specify the minimal performance obligations to be expected from the employees and also specify the limits within which managerial power may be exercised. The mutuality of the contract implies free consent from both parties, and it is this free consent that provides the legitimacy which transforms managerial power into authority. Chester Barnard and Herbert Simon have been the most articulate exponents of this view of authority, making explicit the notion that the limits to authority are the boundaries within which managerial power is accepted without independent assessment. While this point of view is subject to the criticism that it reflects democratic ideology, and underplays coercive elements in work organizations, it does appear that modern management theory is based on its premises.

With this brief statement as the only background which we intend to provide on the nature of authority, we may turn to Etzioni's thoughts on

legitimacy and involvement. Etzioni's point is that authority - that is, legitimated power - alone is insufficient to guarantee the positive involvement of the lower participants. To the legitimacy must also be added the gratification of the actor's need dispositions by the other's exercise of power. Therefore positive involvement derives from both legitimacy and gratification; alienation derives from the lack of both, and intermediate involvement is the result when only one of the two is forthcoming. The implication here is that as one moves from normative to utilitarian to coercive compliance, one should expect decrements in real authority (1961, pp. 14-16).

Dubin (1958, Chap. 6) feels it worthwhile to make two types of distinctions about authority. First, one may ask about the amount of authority, and Dubin suggests that this is best indicated by measuring the proportion of a man's working time spent in direct control over subordinates. In this view, the amount of directing authority increases as authority is delegated downward in the organization. The usefulness of this notion is questionable for its application forces one to conclude that the foreman has more authority than the chief executive since more of his time is spent in direct control of subordinates. Of more use, as an approximation to the amount of authority, is Dubin's use of the term "responsibility". Our amended formulation is that the more subordinates for whom a person is responsible - either directly or through a hierarchy of delegation - the more authority that person has.

The second distinction refers to the type of authority. Dubin differentiates between directing, controlling, coordinating and innovating authority. (1) Directing authority requires that its holder see that a fixed and established procedure is carried on in accordance with predetermined expectations. It is related to the actual productive or "doing" part of the organization. (2) Controlling authority involves the establishment and policing of recognized standards of behaviour. This type of authority lends itself to a high degree of specialization within the organization. (3) Co-ordinating authority is that involved with the integration and coordination of diverse operations. It is normally required that its holders have different kinds of background and experience from those with directing and controlling authority. (4) Innovating authority is normally lodged with those who have little to do with the day to day operations of the organization. Some isolation from the organization is required so as to facilitate a freshness of viewpoint and originality. This type of authority is usually possessed by a staff.

Dubin suggests that if you regarded four levels of the organization in terms of the type of authority possessed, the ideal typical picture would be as follows:

RANK ORDER ON TYPES OF AUTHORITY

Level in Organization	Type of Authority			
	Directing	Controlling	Coordination	Innovation
Foreman	1	2	4	4
General Foreman	2	1	2	3
Vice-President	3	3	1	2
President	4	4	3	1

Crozier (1964,p.171) raises questions about the relationships between different levels, each of which possesses some power but only some of which possess authority. He suggests that the more complex and dynamic the system of power relationships and of bargaining, the more likely are managerial social controls to be directly and consciously enforced. This is quite different from the description provided by Dalton (1959) where management tended to allow the power relationships to work themselves out informally, formally ratifying the resultant condition. Some of the difference may be due to cultural differences between France and the United States, but most of it may be due to the American managers evincing more goal-directed behaviour than the French in their attempts to achieve greater power and authority. Crozier does suggest a hypothesis which is consistent with Dalton's data, that is, the more dynamic the equilibrium system between power groups, the greater the ease of organizational change.

Etzioni (1961) suggests several distinctions to describe the structure of power relations between an organization's higher and lower level participants. An organization has an integrated collectivity when there is a high proportion of inter-rank relations; a segregated collectivity when it does not. An organization has a differentiated polity when the lower participants evolve their own elite structure rather than accept the formal organization elite. When the lower participants accept the formal organization elite, the organization is described as having an amalgamated polity. (Compare Gouldner's miners and surface workers, 1954.) Applying these definitions, an organization has a well defined boundary between its elite and its subcollectivities (a split collectivity) when the lower participants have their own standards, have a segregated collectivity and a differentiated polity. If, on the other hand, the lower participants do not have standards other than those of the organization, have an integrated collectivity, and an amalgamated polity, the boundary between the organizational elite and the subcollectivities is poorly defined (pp.94-95).

By this reasoning, a coercive organization will have a split collectivity. In work organizations, if the workers are more alienated than committed, one might expect a segregated subcollectivity, with organizational leaders followed on instrumental tasks and lower level leaders followed on expressive issues (1961,pp.125-126).

Gordon (1955) provides an illustration of some of the difficulties created for upper level participants by the differences between integrated and segregated subcollectivities. Examining the role of the high school teacher, he suggests that the more involved is the teacher in the status characteristics of the students, and the better he understands the student status system, the less role conflict he will feel in the performance of his job. However, the more he is involved, and understands, the student status system, the more difficulty he will have applying universalistic standards in evaluating student performance, with role conflict once again the result. Gordon suggests, then, that role conflict occurs whether or not he is involved with, and understands, the student status system.

Finally, Stinchecombe (in Etzioni, p.174, footnote 20) suggests that the stratification system within an organization can be envisaged as matching its compliance type. A coercive organization has a caste-like structure with rigidly separated inter-rank social distance. A utilitarian organization may be expected to have a multi-level, differentiated rank structure. A normative organization would typically be equalitarian, but with a high separation of members from non-members.

ORGANIZATIONAL EFFICACY

What are some of the outcomes of organizational structural arrangements being directed toward effective goal attainment? Conversely, what are some of the implications of efficacy deriving from organizational structure? In this section, we shall cite some of the relevant literature.

Stotland and Koblen (1965) study a mental hospital which had to close its doors. The precipitating cause was an organizational ideology which could not be sustained by available psychiatric technology. In the face of growing failure, there were strong pressures toward bureaucratization, with a consequent change in the staff involvement from normative to calculative compliance patterns.

We may recall that Crozier's treatment of bureaucracy was of an organization which is unable to achieve natural change to correct its dysfunctions. Bureaucracies, thus defined, change only in crisis situations, the crisis emanating from a dangerous drop in efficacy (1964, pp. 195-198). Dalton, who describes the converse case, found that the fluidity of relationships and the adoption of organizational goals as the means of achieving personal goals resulted in a high order of efficacy and ease of change (1959).

Goode (1967, pp.16-18) holds that rationalized bureaucracy and factory organization are two mechanisms by which more efficient use is made of the inept. Both systems break down tasks so that they can accommodate a wide range of talent. Both are sufficiently controlled to reduce the chance of catastrophic failure by the inept. Both have the unfortunate consequence of diminishing the advantage of high talent, but the overall result is higher efficacy than the systems which neither protect nor make efficient use of the enept.

Gross (in Faris, 1964, pp.652-653) suggests that bureaucracy may be an impediment to goal attainment. He distinguishes between leadership and management or administration, the latter being bureaucratic and taking the organizational structure for granted. When the attainment of goals requires leadership, and the bureaucratic structure cannot provide it, efficacy suffers. Gross tends to hold the view that the organization gets its leadership from outside, calling on experts from outside to play a "sparking function". The similarity of this view to that of Crozier should be noted.

Etzioni (1961, pp.129-130) analytically dissects consensus into six spheres. There may be consensus on: (1) general values, (2) organizational goals, (3) means, (4) participation in the organization, (5) performance obligations and (6) cognitive perspectives. While consensus between status levels may not always be important, Etzioni points out that within a given stratum, the needs for consensus are high.

Whereas normative organizations require a high degree and wide range of consensus on values, goals and means, work organizations normally require high consensus on participation, performance obligations, and cognitive perspectives (pp.136-137). When this consensus is not forthcoming efficacy suffers.

Even prior in Etzioni's scheme is the reason for organizational specialization on given compliance structures. Etzioni states that most

organizations tend to emphasize only one means of power, relying less on the other two. This is so because when two kinds of power are simultaneously emphasized over the same subject group, they tend to neutralize one another. He hypothesizes, therefore, that coercive organizations specialize on coercive power, utilitarian organizations on remunerative power, and normative organizations on moral or social power (pp.6-7). It is the need for effectiveness that induces the pressure for congruence between the use of power and the terms of member involvement (pp.12-13). To the extent that the social environment permits it, the organization inexorably moves from incongruent to congruent compliance structures. Conversely, the greater the degree of congruence, the more the organization can resist environmental pressure toward incongruence (p.14). In a subsequent development, Etzioni holds that organizations require congruence between their goals and compliance structures, and that it is the need for effectiveness that determines this requirement (pp.71-79). Organizations which pursue economic goals will therefore be more effective if they have utilitarian, rather than coercive or normative, compliance structures (p.73). Further, organizations which pursue multiple goals will be most effective if they develop parallel combinations of the required compliance structures (p.75).

Finally, Brim (cited in Etzioni, 1961,pp.109-110) makes several assessments concerning effectiveness of teachers and of schools. Teacher effectiveness is thought to be the result of teachers playing

instrumental rather than expressive roles. School effectiveness is reliant upon normative rather than coercive control, and upon student leaders, who provide the expressive leadership, supporting school norms.

LEADERSHIP STYLE

Based on the assumption that power derives from organizational position, personal characteristics, or both, Etzioni proposes the following typology of elites:

POWER DERIVED FROM OFFICE

Personal Power	+	−
+	Formal Leader	Informal Leader
−	Officer	Non-elite

At the lower levels of the organization, the organizational elites are formal leaders and officers. By definition, informal leaders are non-organizational elites. Formal and informal leaders can maintain compliance beyond the "zone of indifference". Informal leadership is less stable than either formal or officer leadership since within the organization itself, it is not institutionalized. In situations where routine must be controlled and where continuous performance is required, officers are most effective. Officers typically exert the most control over instrumental activities, while informal leaders are least likely to be so engaged. Informal leaders, in turn, are most likely to control

expressive activities. Formal leaders are likely to equally divide their time between instrumental and expressive activities (1961, pp.90-93).

Charisma may be defined as an actor's ability to exercise diffuse and intense influence over the normative orientations of other actors. Like Weber, Etzioni recognizes both pure and routinized charisma, and he notes that routinized charisma always resides in organizational office. To this extent, since it always resides in office, routinized charisma is an ascribed characteristic. Pure charisma, on the other hand, may require performance by the actor to demonstrate the special powers on which the charisma is based. Etzioni wants to escape Weber's treatment of authority as charismatic or bureaucratic, and to suggest that analytically, it is possible to be both charismatic and bureaucratic. To do this, he suggests that pure charisma can also be achieved in an organizational office, that it tends to replenish the stock of routinized charisma which, in any case, has a tendency to decline over time, and that it is therefore valid to describe both personal and routinized charisma as residing in the same person (1961, pp.203-206). Structurally, charisma can be concentrated in top positions (T structure), in all line positions (L structure) or in one or more ranks other than the top rank (R structure) (p.208).

We now turn to reports on supervisory styles. Slocum (1966, p.9) reports, without supporting data, that close supervision results in much less freedom for the exercise of personal initiative and ingenuity, whereas

general supervision provides opportunities for the exercise of wider latitude, judgement, ingenuity, and initiative. This results, in the case of close supervision, in the worker making a generalized accommodation to expectations either for direction or for obedience, and internalizing these aspects of the occupation as aspects of their self-concepts.

Morse (1953) reported that, in a study of female workers in a large metropolitan insurance firm, workers subjected to a close supervision style were less satisfied with the supervisor's ability to handle people, less satisfied with the reasonableness of her expectations, and generally less satisfied with the rules she enforced. Katz and Kahn (1960) reported finding a relationship between close supervision and aggressive feelings of workers in a tractor plant. Katz and Kahn (1952) provide data consistent with the argument that the observed relationship between close supervision and lowered productivity is due to worker feelings of aggression toward the supervisor inducing retaliatory restriction of output. Katz, Maccoby, Gurin and Floor (1951) found that workers retaliate against close supervision by slow-down which induces the foremen of low producing work groups to use punitive styles of supervision, which, in turn, reinforce the counter-aggressive slowdown. (All these works cited by Day and Hamblin, in Bell, 1966).

Day and Hamblin (in Bell, 1966) attempt to use the frustration and aggression hypothesis to sort out the differences between close and punitive supervision. Both styles induced lowered productivity in the groups

they studied. Both styles also induced greater feelings of aggressiveness to the supervisor and to co-workers. But punitive supervision appeared to elicit aggressive behaviour to the supervisor whereas close supervision did not. The authors account for the difference by pointing out that close supervision is frustrating and that aggressive feelings may result from the frustration, but punitive supervision is in itself aggressive behaviour calling forth aggressive responses.

Gross (in Faris, 1964,pp.653-655) cites a number of studies concerned with supervisory style. Against Katz's finding that employee-oriented managers are more likely than production-oriented managers to have high productivity work groups, he juxtaposes Whyte's query about the implied causal flow - are the groups more productive because of the supervisory style, or is the production-oriented style a response to low productivity? The Michigan group, with which Katz is associated, has generally confirmed to their own satisfaction, at least, that close supervision is not as productive as general supervision. Against this, we may cite Morse and Reimer (1956) who conducted an experiment with four groups of clerks, two of whom were given a large degree of autonomy in making work-related decisions, and two of whom were strictly supervised and who had the same order of decisions made by supervisors. The data indicated that it was the workers with the hierarchically organized supervisory control who showed the greatest gains in productivity even though these same workers liked their work less and

expressed a preference for group decision-making processes (cited in Bell, 1962, p.263). This would appear to support the proposition that close supervision is not causally related to lowered productivity but that it is related to work satisfaction. It would also support the ambiguous relationship observed between satisfaction and productivity.

Blau and Scott (1962) introduce the notion of hierarchical independence to account for the effectiveness of the supervisor. That is, it is the extent to which the supervisor is himself independent of those above him that is determinate of worker loyalty and willingness to carry out his directives. Moreover, Blau and Scott found that when the professionals they studied had a fiduciary responsibility to their clientele, their productivity did not drop even when under authoritarian supervision.

Finally, Gross (in Faris, 1964, p.655) cites Whyte as having made an important addition to the flatness and tallness of the supervisory pyramid argument which states that flat pyramids imply general supervision while tall pyramids imply close supervision. Whyte suggested that the flat pyramid is effective only where the various departments are relatively independent of one another but where there are inter-dependent sets of departments, loose supervision would not protect against either delays or malcoordination.

ORGANIZATIONAL EMPLOYMENT OF PROFESSIONALS

By and large, the literature on the organizational employment of professionals divides into two somewhat opposed camps. One believes that professional effort is socially organized in terms of high degrees of self control, internalized work norms, colleagial peer control, etc. In this view the hierarchical authority system, delimited work assignments, and organization control inherent in large-scale organization are inimical to the bases on which professional activity is organized. The other view holds that the organization is somewhat responsive to professional expectations, and that in this respect, bureaucratic bases of organization are foregone in ways designed to accommodate the employment of professionals. The literature from both camps will be reviewed.

Goode (cited in Etzioni, 1961, pp.258-259) suggests that bureaucrats exert more control over professionals, and the professional community exerts less, than is commonly thought. Further, he finds that, in one way or another, even professional control over the performance of practitioners has been transferred from the colleague organization of the professional community to the professional organization, in which lay administrators exercise considerable control. Lay control over professionals might be found in such organizations as public schools, many mental hospitals, some general hospitals, and a number of research organizations. His most important point is that even when professionals within organizations are

supervised by colleagues in the same organization, the controlling colleagues are acting on bureaucratic rather than professional criteria.

Lewis and Maude have devoted a considerable part of their book to putting forth the thesis that the government employment of professionals is harmful to both professional and government interests. Written more from the standpoint of political journalism than social science, their book offers little data to substantiate their arguments. They state the dilemma of the employed professional as follows. Shall the employed professional strictly concentrate on professional work and thereby lose the power to direct it, or learn administration so as to be able to remain in control of it, thus losing the time to practise it (1952, p.7)? Lay administrators in government service are described as neither understanding professional expertise nor caring to acknowledge the fiduciary responsibilities that accompany it (Chap. 6). Paradoxically, Lewis and Maude do not treat the commercially employed professional as they do the State employed one. They speak of the "civilizing" effect of the professional upon business, and are not at all troubled by whether the professional's advice is any better received by business management than by civil service administration (Chap. 7).

Scott (in Vollmer and Mills, 1966) poses a theoretical argument based on divergent models. The professional is trained to do the whole task, to exercise independent judgement, and to rely on sole competence. The

typically long training period involved heightens the probability that professional attitudes will have been assimilated. The bureaucrat is trained to do the part of the task to which he has been assigned, with others doing other parts. This requires coordination and supervision. It also obviates the need for specially inculcated values. Therefore, Scott holds that professional and bureaucratic models are different principles of organizing activity, regardless of the activity itself. Due to these differences, the professional would be expected to: (1) be resistant to bureaucratic rules, (2) reject bureaucratic standards, (3) resist bureaucratic supervision and (4) offer only conditional loyalty to the bureaucracy.

Strauss and Rainwater (1962,p.113) find that among chemists, it is the industrially employed who most feel that their autonomy is reduced by the control of administrators, and who, therefore, evince the greatest feelings of dissatisfaction.

Consideration of non-bureaucratized organizations also suggests that factors other than administrative formalism are involved. For example, three studies of mental hospitals indicate that the problem for the employed professional lies in the relationship between different professional groups. Strauss et al. (1964) view this type of organization as an "arena" within which the different professional groups jockey for power, position, prestige and influence. Rushing (1964,pp.254-255) describes essentially the same phenomenon, except that the power of the psychiatrists was so

firmly entrenched that there was less "give" to the organization. However, strict adherence of each profession to its own norms and the presence of a multifunction organization induced feelings of dissatisfaction and frustration for those professionals who could not, and yet were expected to, accommodate to service functions other than their own. Because the demands of the most powerful professional group were, in essence, the organization demands, there was a conflict between organizational demands and the professional demands of the other groups. Loeb (in Greenblatt, Levinson and Williams, 1957) suggests that some of this difficulty is obviated when one's professional training is for the playing of an ancillary function. The difficulty is created when one is trained for a major function but is organizationally required to play an ancillary role. The highest status in the organization goes to those whose work function is regarded as most important.

Vollmer (in Vollmer and Mills, 1966) sees no necessary antithesis between professionalism and bureaucracy. He divides the physical scientists in his study as follows:

OPPORTUNITIES TO SELL RESEARCH IDEAS

Importance to Respondent of Selling Research Ideas	+	−
+	Satisfied Entrepreneur	Frustrated Entrepreneur
−	Reluctant Entrepreneur	Non-Entrepreneur

Vollmer found that satisfied entrepreneurs tended to be those who were most professionally interested and professionally experienced. They were also the most productive and renowned. The reluctant entrepreneurs tended to be next most productive, followed by the frustrated and non-entrepreneurs between whom there seemed to be very little difference. Vollmer suggests that research entrepreneurship is an important adaptive mechanism which helps insulate the scientist from anti-professionalizing influences in the organizations which employ him. However, productivity measures also varied with the degree of bureaucratization, there being almost no difference at all between satisfied-and-non-entrepreneurs in the most bureaucratized settings, and the greatest difference between them in the least bureaucratized. Vollmer's hypothesis is that entrepreneurial activity is a function of low bureaucratization, and high organizational emphasis upon it.

Kornhauser (in Vollmer and Mills, 1966) makes the point that professional activities (especially those of a creative nature) require functional autonomy and freedom from interference. Organizations, on the other hand, require functional integration and the efficient coordination of diverse activities. The question for Kornhauser is whether these two characteristics need be opposed to one another. Based on his study of scientists in industry, he answers that they need not be. To the extent that each is dependent on the other, and to the extent that participation can be limited, to this extent can the organization and the profession achieve some

sort of equilibrium in a pluralistic type of balance. Multiple centres of power can develop in which the organization does not wholly absorb the profession, and vice versa. A plural system of relations ensures a balance between freedom and power, between conditions conducive to control and those conducive to creativity. In the end, says Kornhauser, a more effective structure is summoned than that which would be attained either from isolation of production groups from professional groups, or from the absorption of one by the other.

Gross (1965, pp.67-69) suggests that organizations which employ large groups of professionals have evolved two new structural forms. The specialist form of organization is the most common. It is a collegial type of organization, with a number of persons with similar training brought together under a leader or manager who himself is a member of the profession. Gross reports that professionals prefer this form since their work is related to their trained capacities and is evaluated by those who have the competence to do so. Ease of communication within the group and high morale are characteristic. The problem is in the relationship of the specialist group to the larger organization. An alternative form of organization is the task force, which brings together persons with different backgrounds to complete a particular task. Depending on the needs of the work and its state of completion, specialists may be added to or deleted from the group. The problems are in coordination, getting sufficiently skilled and eclectic

leadership, the deference relationships between different professionals, and in refitting the task force member into the organization.

Glazer's study of government employed scientists is cited by Slocum (1966, pp. 246-247). He found the standard career pattern to be characterized by a considerable amount of mobility in its early stages. Promotions were based on collegial recognition of accomplishment, and the scientists considered the setting an appropriate place to pursue a scientific career. However, the typical scientist was found not to make a career commitment to the organization until he reached the supervisory level. Commitments prior to that time, were to the scientific discipline.

Slocum (1966, pp. 64-65) suggests that the need to attract and retain competent scientific and professional personnel has caused corporations to establish career lines which provide adequate opportunities for upward mobility. This results in larger salary differentials between top and bottom than is found in the older technical operations, and an alteration in the pyramidal nature of corporate structure. A structure which gives the professional a sense of participation in decision-making about his own activities induces higher morale and greater productivity from him. Unfortunately, Slocum provides no supporting data.

Finally, Naegele (1956), in a study of clergymen, teachers, and psychiatrists working in the same mental health project, found that the observed gap between psychiatrists and clergy, and the yet wider gap between

psychiatrists and teachers, was explicable in terms of the institutional contexts in which the roles are carried out, the organizational and professional facilities for implementing the work obligations, the way in which the clients and practitioners were related to one another, and the relation of the organizational roles to accepted standards of a given profession's conduct.

By way of assessment, it appears that the literature in support of organizational suppression of professional standards of work has much less empirical support than that pointing to organizational adaptation to the fact of professional employment.

III INTERPERSONAL FACTORS

RECIPROCITY

A common view of interaction is one in which the actors are placed in a network of mutual obligation, the activities of the one eliciting reactions from the other which are either a positive or negative sanction depending on whether the other's expectations have or have not been met (Parsons, 1951). Relationships thus conceived take place within a matrix of mutual expectation, each actor attempting through his responses to ensure that the other conforms to the expectations held out to him. In an institutionalized interaction system, the reciprocal obligations of the parties tend to be clearly established, readily understood, and therefore easily maintained. On the other hand, the potentiality for disagreement about the validity of expectations, or misunderstanding of them, and for the effectiveness of possible rewards and punishments, all tend to be highest in uninstitutionalized relationships. The one element which, however, seems to be present even in uninstitutionalized relationships - and indeed which is thought to be a starting mechanism in their institutionalization - is the norm of reciprocity (Gouldner, 1960). That is, there does appear to be a universal norm which requires that benefits received by one actor from another should be returned either immediately or at some future date. This is often the first expectation which binds the actors into a web of mutuality and which sets the sanctioning system into initial operation. We begin our review of interpersonal factors in

work-related behaviour with consideration of reciprocity, since it is of such crucial importance in converting initially unstructured contacts into relatively stable relationships.

The classic treatment of reciprocity may be found in Whyte's Street Corner Society (1955). In Whyte, the essential social cement binding the members together into a relatively cohesive group was the felt obligation to reciprocate favours received from other group members. It is significant that repayment was not usually in kind; deference to the wishes, interests, or another's claims to leadership tended to be the customary currency of repayment used by the followers. In this connection, one remembers Doc's unemployment, and lack of funds with which to place followers under the obligation to reciprocate with deference, caused a crisis in his leadership, a crisis fed in large measure by a reversal of the usual flow or obligation brought about by his occasional need to accept money from his followers. Doc's consciousness of the processes involved was indicated by his preference for accepting loans from only those closest to him in rank, so as not to unduly upset the established ranking system of the group.

Blau (1964) used this idea to elaborately re-analyze his data on consultantship patterns in the Federal Law Enforcement Agency (1956). Using indifference curves, a technique borrowed from economic analysis, Blau is able to examine how reciprocity operates to set a price (in terms of deference owed) for benefits received (consultation with more highly skilled

workers); when the price becomes too high, less experienced employees tend to consult with one another, a relationship in which the lower benefits are made tolerable by the lower costs. Moreover, when the deference to the consultant becomes depreciated by a reduced marginal return for the time and effort expended, his services tend to become less readily available which again bids up the price and increases the marginal return. Therefore, in theory at least, Blau is able to predict the patterned consultation relationships between the highly and less highly skilled workers, and among less highly skilled workers with one another.

A similar idea is at the root of Crozier's conceptualization of bureaucracy (1964). He views bureaucracy as a system of rigid relationships, characterized by impersonal procedures and high social distance between ranks, and which as a consequence is unable to correct its own shortcomings. For Crozier, the impersonality and social distance emanate from the refusual of French workers to become involved in the set of dependencies which reciprocity would force upon them if contact between ranks were more personal and more frequent. Crozier's interpretation is admittedly speculative but it does at least tend to be consistent with the generally held view of French culture.

In an interesting analogue to Crozier's analysis of structured avoidance as a means of escaping reciprocity, Smigel (1964, p.332) describes a similar process used by partners and associates in Wall Street Law offices.

The lower ranking associate maintains some autonomy over assignments mainly through the use of avoidance techniques. If he can avoid being asked to accept an assignment, he need not refuse it if it is unwanted. The partners, apparently sensitive to this wish for autonomy on the part of their employees, will occasionally give the associate a choice of assignments, thereby making refusal of any one particular case unnecessary (since the process involves choosing one rather than refusing one).

Rushing (1964) makes use of the reciprocity concept in his analysis of the relationships between different occupational groups in a psychiatric teaching hospital. His analysis and interpretation are sometimes subject to serious doubt, but he introduces several distinctions that are worthy of consideration. Rushing distinguishes between instrumental and expressive responses from high-ranking to lower-ranking professions. The instrumental responses tend to be structural and bureaucratic; the work to be done by each profession is formally determined by hospital structure and procedures. The expressive responses are, on the other hand, imbedded in the interactional contacts of one professional group with another, and are taken by the lower-ranking groups to designate the worthiness of their occupational contribution in the eyes of the higher-ranking. The social workers used strategies which were cost-inducing for the social workers because of the efforts expended and the possible ego-loss should reciprocation not be forthcoming. The problem for the social workers was precisely this

lack of reciprocation from the psychiatrists. The result of the inoperability of their expectations for reciprocity was heightened dissatisfaction for the social work group.

In a theoretical and rather provocative essay, Goode (1967) suggests that reciprocity accounts for the extent to which loyalty is given to one's work groups. The inept worker, who is protected by his group of fellow workers, and reciprocates this protection with loyalty is consequently more likely to follow the group's output norms. When the inept worker is not protected by his peers, but enjoys managerial protection instead, the loyalty flows to the supervisor and there is greater conformity with managerial output norms than with group norms. While this is a plausible line of reasoning, Goode provides no supporting data. From available data on group output through the sanctioning of group members, it is not clear in which direction the causal link between conformity to group standards and protection by the group actually flows.

GROUP COHESION

Cohesive groups are those in which norms of reciprocity are generally most highly institutionalized, expectations most clearly known, and the member sanctions the most effective. Therefore if interpersonal relations within work groups are imagined to have an effect on worker behaviour and worker attitudes, it will be in cohesive work groups that these effects will be most clearly noted. Let us therefore examine some of the finds which have emerged from a consideration of work group cohesion.

Roethlisberger and Dickson (1939) were the first to scientifically demonstrate the relationship between group cohesion and group control of productive output. They noted that the group had evolved an output norm associated with what the majority of the workers considered a "fair day's work", and that the better integrated and more cohesive the worker-subgroup, the greater the correspondence of reported output to the norm. The operative mechanisms which account for the relationship between worker productivity and work group cohesion appear to be the extent to which the group makes an effort to sanction deviants from its norm, and the extent to which a given worker is concerned about the approbation or disapprobation of other group members. Roethlisberger and Dickson,writing from a managerial perspective, treated the control of output as a "restriction of output", a consequence of their finding that the workers were physically able to produce more than they actually did produce.

Other studies have corroborated the relationship between group cohesiveness and controlled output. Roy (1953) noted that disapprobation from fellow workers was forthcoming when machinists either went too far above or too far below the group output norms. In the former case, the deviant was a "rate buster", in the latter, a "chiseler". Roy was careful to point out, however, that group cohesiveness is a factor in the enforcement of the output norm. From his data the actual genesis of the norm appeared to be more closely tied to the piece-work rate for a given job, and the individual

worker's evaluation of its earning potential, than to a fixed, inflexible, group standard.

Not all students of the subject agree that group cohesion results in restricted output. Another line of reasoning is presented by Katz and Kahn (1952) who demonstrate in such varied work groups as clerks, railroad employees and factory workers that high cohesion appears to be associated with high work satisfaction, lower absenteeism, and reduced turnover; then it is natural to find, as Katz and Kahn apparently did, that productivity will increase. However, they cannot satisfactorily demonstrate in which direction the causal mechanism works. Are the groups more cohesive because they are more productive, or are they more productive because they are more cohesive? Because the workers in question had no objective information about their group productivity, Katz and Kahn choose to believe that the workers are more productive because they belong to highly cohesive work groups. We must, however, not assume the workers to be so unsophisticated as not to have arrived at their own estimates of output - the data offered by Roy (1953, 1954) and by Roethlisberger and Dickson (1939) certainly reveal a shrewd awareness of the workers as to their actual output - and therefore the original question still remains.

Seashore (1954) provides data which support either a restriction or elevation of output relationship with group cohesiveness. In a field study of 228 work groups in an industrial setting, he is able to establish

that high cohesion is associated with a convergence of output rates. That is, there is greater variation in the productivity of the members of the low cohesive groups than there is for the members of high cohesive groups. Members of highly cohesive groups tend to converge on a group based norm. Whether that norm represents a restriction or elevation of output is related to the workers' orientation to management. Negative orientations and high cohesion result in lower productivity. This interpretation by Seashore, in addition to being well documented, is consistent with the material presented by Roethlisberger and Dickson (1939) and by Roy, for in both studies the workers did not trust management not to use high output to adjust the piecework rate to their disadvantage. Blau and Scott (1964, p.101) also demonstrate the convergence effect. They divided welfare workers into groups labelled either as pro-client or anti-client, based on majority responses within groups to the criterion question. Then, dealing with individual responses to other questions, they show how pro-client groups press for greater pro-client and less anti-client attitudes despite the workers' predilection on the original criterion question.

The interaction effect of high cohesion and the direction of sentiment toward management is illustrated in a set of findings presented by Crozier (1964). He found, in both a large clerical agency and a large monopoly manufacturing industry, that the greatest opposition to management and to conditions of work came from the senior and more responsible workers

who were well integrated in cohesive work groups. Crozier's interpretation is that these feelings of opposition are learned in the work-group setting and that group participation is the major instructing and reinforcing influence.

The Katz and Kahn argument (1952) as will be recalled, used enhanced work satisfaction resulting from cohesion to account for increased productivity. Homans (1961,p.282) raises the question as to whether worker satisfaction does indeed raise productivity. Homans' data indicate that the question is more open than Katz and Kahn feel it to be. Homans suggests that high satisfaction is often associated with lower productivity, that the more satisfied a man is the less he may want to do, and that therefore he may be less productive precisely because he is satisfied. This line of reasoning is consistent with the costs and rewards framework which underlies Homans' recent work in explaining social behaviour.

Etzioni (1961,pp.196-198) muddies the water still further. He sharply attacks the arguments linking group cohesion and job satisfaction, taking the view that satisfaction is essentially multi-dimensional, the product of many factors of which cohesion is but one. The extent to which cohesion is determinate of satisfaction is therefore far less than most studies have indicated, and propositions linking cohesion, satisfaction and productivity are much weaker than their authors usually acknowledge. This is a logically phrased argument to which Etzioni, unfortunately, brings no data to bear witness.

Data presented by Roy (1954) appear to indicate that group cohesion is a facilitating rather than a causative mechanism in the amount of productivity found. In a participation-observation study among machinists, Roy found that the workers in question were highly conscious of economic rewards. When management changed work rules and procedures in ways perceived by the workers to dampen productivity, and hence take-home-pay, the cohesion of the work group allowed collusive avoidance of the rules so that productivity could be maintained at the desired level.

Blau and Scott (1962) demonstrate that group cohesion is determinate of the degree of resistance of welfare workers to client pressures. The most effective mechanism for resisting illegitimate client pressure was found to be a norm of impersonality. The extent to which workers manifested this norm was found to be highly related to the cohesiveness of the work group to which the workers belonged. In the table which follows, note, however, the small sample size on which the conclusions are based (1962, Table 10, p.105).

TABLE 7

GROUP COHESION, POPULARITY, AND REACTION TO CLIENTS

Reactions to Clients	Group Cohesion: High — Individual's Popularity: High	Group Cohesion: High — Individual's Popularity: Low	Group Cohesion: Low — Individual's Popularity: High	Group Cohesion: Low — Individual's Popularity: Low
Impersonal	62%	65%	30%	20%
N(=100%)	17	12	14	17

Bar-Yosef and Schild (1966) extend consideration of the question of resistance to pressure, whether from the client or from the supervisor. Generally, welfare workers resist what to them are illegitimate pressures by the use of either individual or joint defences. The use of a joint defence is indicative of some degree of integration into a cohesive work group. Those who used individual defences tended to be erratic and inconsistent in their manner of response to pressure, unless they were supported by a strongly-held ideological conviction which provided them with a consistent policy. The data indicate moreover that erratic behaviour is found twice as frequently in units which attempt to reduce the pressure structurally as against units in which the workers informally evolve a joint defence.

We may well recall that one of the effects of group cohesion was convergence of productivity toward the group-evolved norm. Whether this convergence was a restriction or an elevation of output depended in large measure, on the workers' orientation to management. The next question that we consider is whether or not inter-rank cohesiveness is at all determinate of the direction of sentiment toward management and the organization. Etzioni (1961, p.196), without presenting any data to support his theoretical speculations, takes the view that inter-rank cohesion - what he calls hierarchical cohesion - "may, if the high-ranking personnel are committed to organizational norms, be directly related to lower participants' positive involvement in the organization". In a later article, however, he takes the

view that it is unlikely that the type of expressive leadership productive of inter-rank cohesion will be effectively forthcoming from the supervisory ranks as long as instrumental goals are still seriously pursued, and he therefore greatly limits the instances where hierarchical cohesion will be found (1965).

In his consideration of work groups as interest groups, Sayles (1958) finds that the direction of sentiment to the organization varies independently of cohesion. Cohesion seems more determinate of the ability of a group to pursue a given strategy so that those strategies which required sustained and protracted action can be used only by cohesive work groups; uncohesive groups can evince no real strategy vis-a-vis management, being acted upon more than they act; and groups which are only sporadically cohesive tend to be more erratic in their relationships with management, the cohesion tending to dissipate with the solution of any given issue.

Finally, recalling the point made by Crozier about the instructive aspect of participation in cohesive work groups, we present findings from Becker et al. (1961,Chap. 9) to more fully document the process. The authors note that freshmen at medical school begin with an unrealistic appraisal of their ability to learn all there is to learn about medicine and that in order to survive, the originally idealistic belief must be replaced by a more realistic perspective. Over the course of the first year, the medical students shift to studying only what they believe the faculty wants them to know. The speed and ease with which this accommodation was accomplished

was highly associated with the extent to which students participated in cohesive student groups. After six weeks, 66 per cent of the fraternity men accommodated to this survival perspective whereas only 25% of the independent students had done so (p.152). Ultimately, all students shifted, but for the independents the process had to await the development of cohesiveness in the student work teams to which they were assigned.

INFORMAL RANK IN THE GROUP

Do differences in rank in interpersonal relations make any differences in behaviour, or are all members of relatively stable groupings equally susceptible to group influence? The available evidence appears to indicate that rank differences do matter, and that differential ranking does indeed appear to be an important sanction in ensuring that group expectations are adhered to.

The classic treatment of the subject is available in Whyte (1955). Rank in the informal group is so important a determinant of performance that some of the material actually strains the reader's credibility. Whyte would have us believe that a baseball player of semi-professional calibre performs at a much reduced ability level when playing in a group of inferior talents in which he has low social rank, or that a normally indifferent bowler turns in a superior performance when supported by the highest ranking in the group. Fortunately, the amount of ethnographic detail provided affords us an insight into the processes whereby these outcomes occur. Performance is thought to be affected by the amount of encouragement and emotional support given. This has the effect of raising the level of confidence, and providing a more relaxed emotional state. When the encouragement and support of one participant is matched by attacks and gibes on his opponent, the competitive advantage goes to the former - improved performance of the highly supported group member is accompanied by the depressed performance of the member under attack.

Not all group members are equally vulnerable to the sanctions of the high ranking. Conformance with group standards is partly elicited by the desire of group members to rise, or at the very least not to fall, in the esteem of their fellows. In this situation every group member, except perhaps those already ranked at the bottom, has something to lose. In a voluntary group even the lowest ranked is liable to expulsion, and therefore to the extent that he seeks to avoid expulsion is somewhat responsive to group expectations. In a work group, however, expulsion is a sanction not normally available to the group itself - hiring, firing, and transfer being a managerial prerogative - and therefore the lowest ranking has the least to lose insofar as esteem operates as a sanction. In such a situation the already low ranking group member may feel least impelled to give up his already deviant behaviour. The cases of W7 and W9 in the Bank Wiring room described by Roethlisberger and Dickson (1939, pp.517-521) illustrate this point particularly well.

By the same line of reasoning one sees that the highest ranking, having the most esteem to lose, are particularly vulnerable to group sanction. High rank is won, in large measure, by close conformity to the normative standards of the group, and once achieved, can be maintained only by continued conformance. This has been documented by Whyte (1955), Blau and Scott (1962), and Roethlisberger and Dickson (1939), and has been stated as a fundamental proposition of social science by Homans (1951).

Gross (1964) modifies the proposition somewhat by suggesting that the extent of group control is a function of how important to one is status in the informal work group. This is an important caveat since it is possible that high rank in one group generates aspirations to leave that group for other groups of still higher rank. In such a case, the normative and sanctioning systems of the group in which membership is sought may become more salient than the like systems of the group in which high rank is already enjoyed. Since high social rank is thought to be associated with a wider range of social interaction (Homans, 1951, p.145), and hence with increased opportunity for contact with other groups, this is a highly plausible speculation. The same process has been described in the literature on reference groups, anticipatory socialization, and upward social mobility.

The picture we have of the high ranking informal group leader who wants to remain a leading member of his group is not a particularly appealing one. What are the rewards associated with high rank if the price of its maintenance is consistently strict compliance with group norms? Does leadership rank necessarily imply such great conformity? If so, one may raise legitimate questions as to the intrinsic value of leadership rank.

Several qualifications have to be introduced.

First, it should be noted that leadership rank is normally not rewarded for compliance alone. There must be compliance to the group norms but there must also be other bases on which high rank is awarded. Factors

of personality, appearance, skill, gregariousness, courage, etc., etc., may be involved, the particular combination necessary in any given instance being determined by the nature of the group in question. We know, from Bales' small group studies, that task-oriented groups tend to evolve two quite different needs for leadership, one on the basis of facilitating the instrumental achievement of the sought goal and the other on the basis of expressive competence in keeping the group in a state of social-emotional balance. The existence of these other, perhaps functionally more important than mere conformist, criteria for according high rank makes us aware that the greater the functional importance (that is, the more the group needs the member's contribution), the less likely it will be to impose negative sanctions for non-absolute compliance with its less functionally important norms. Relative compliance may suffice. In this respect, Blau and Scott (1967,pp. 94-95) find that high status is associated with modal, not maximal, compliance.

Secondly, using data from their own studies, Blau and Scott demonstrate that, apart from a work group's most salient values, high rank affords the greatest ability to resist group pressure without bringing forth negative sanctions. As they put it, "... integrated members, who have already proved their acceptability, are permitted greater freedom to differ from the majority than unintegrated ones, who have yet to prove it" (1962,p.107).

Thirdly, high rank in a group is itself determinate of normative consensus. The high ranking are the most likely to bring about shifts in the normative consensus of a group (Hopkins, 1965). In an unpublished critique of Hopkins, Ryant (1967) demonstrated that innovation and bringing about shifts in the normative consensus of a group can itself be productive of higher rank for the influential innovator. Dalton (1959, p.20) uses a similar notion to account for informal rank among middle managers. A man's rank was determined by the extent of others' deference to his wishes, attitudes and opinions rather than by his conformance to the ongoing normative system of the group. In other words, for Dalton, high rank is synonymous with influence over the actions and behaviour of others.

To sum up, it has been noted that rank tends to be available as a sanction to ensure group control over behaviour and that its effectiveness is a function of the extent to which high rank and the avoidance of low work is sought. We have seen that the lowest-ranked tend to be the most deviant from group norms, a factor that has been both a cause and a reinforcement of the low status. We have also found that while in many respects the highest ranked are most strictly bound by the salient norms of the group, they are also, in perhaps less important respects, most free to resist group pressure. The high ranked are also in the most propitious position to effect changes in the normative system of the group. Finally, high ranking group members tend to be the most effective appliers of group sanctions, and therefore the most important agents of social control within

the group. This last finding has been confirmed even for informal groups of colleagues in independent professional practice (Hall, 1948, Etzioni, 1961, pp.256-259).

One final point may be made with respect to informal rank. Whyte (1955) and Homans (1950) point out that the high ranking group member most frequently initiates activities for others, and that while at the same time leaders more often than others have activities initiated for them as well, the latter process tends to follow the hierarchy of rank in the group. That is, while a low-ranking group member may ultimately initiate activity for the leader, he does so indirectly by calling on the services of those group members closest to the leader in rank. This becomes an important consideration in work groups, especially when the formal flow of work-related communication contradicts the informally-based flow of activity-initiating acts. Whyte (1948) again provides us with a nearly perfect example of this in his description of the conflict generated by female (low-ranked) waitresses giving verbal orders to male (higher-ranked) barmen. The conflict was reduced by re-arranging the procedure by which barmen received their orders so that their activity was initiated by seemingly impersonal and disembodied sources.

INTERPERSONAL COMPETENCE

Interpersonal competence has become a catch-word in the recent schools of thought surrounding management training and development.

Based partly on social scientific findings relating alienated responses to the coercive imposition of will, partly on management ideologies which look for democratic justifications of hierarchical structure, and partly on the proliferation of persuasive and manipulative skills, interpersonal competence (adeptness in social interaction) is asserted as a necessary condition in the development of a successful work career. This trend has been documented after a fashion in the work of William H. Whyte (1956) and David Riesman (1950), as well as in many recent theories of management.

It is not quite clear, however, just what is meant by interpersonal competence. As described by Whyte, the "social ethic" emphasizes the development and exercise of human relationships as a teamwork approach rather than the traditional Protestant ethic of individual hard work as a basis for upward career mobility. Riesman describes a similar orientation as "other-direction", the substitution of firmly anchored internal principles with a well-developed ability to pick up expectations through the social cues of others. One gets the feeling in looking at new management training and development techniques that it is interpersonal competence in this sense that is stressed by human-relations training, T-groups, and the grid theory.

What little empirical evidence we do have concerning social skills and career mobility does not support these approaches, although it must be admitted that Whyte and Riesman were describing what seemed to them to be emergent trends while the data in question have been collected on those,

perhaps already successful before these trends became widespread. But Whyte's own description of the top executive is of one who is solitary, hard-driving and hard-driven, consumed by his work, and not highly persuaded by any need to be, nor even to appear, well-rounded. Similarly, Warner and Abegglan (1955), in a study of 8500 top business leaders in the United States, found little concern for interpersonal competence such as sociability. The important characteristics of this group were strength of character, long hours, a willingness to make difficult decisions, and a readiness to say "no" when others would not. The empirical evidence prompts a redefinition of interpersonal competence. What may be needed for career mobility is a special type of competence: the ability to participate in the work group with enough ease so as to facilitate continued contact with the accompanying ability to free oneself from a felt obligation to meet those expectations which would inhibit organizational and/or personal success.

This view has been confirmed by Dalton (1959) who describes the career-building patterns of middle and higher-level managers. The successful men are interpersonally competent in the sense of being able to slip into and out of a variety of relationships with great facility, and in the sense of being able to manipulate each other and those below them in efforts to build up their own departments. A high degree of social skill is required, but unlike the trends noted by Whyte and Riesman, the standards and principles used are individually-anchored, not group derived. The necessary skills would appear to derive more from Machiavelli than from Elton Mayo.

A not too dissimilar situation is described by Wilensky (1956). The success formula for the expert in the labour union who wants to move ahead is as follows:

> ... make prestigeful contact with union people; demonstrate loyalty or indispensability to, or acquire some hold over a sponsor; seize opportunities to broaden your influence - in general become expert in the workings of your organization (p.238).

This strategy enables the labour union expert to take advantage of two opportunities for self-aggrandizement. First, he is well placed to emerge in a crisis situation. Secondly, he "knows where the bodies are buried". Again, the allegiance is closer to Machiavellian principles than to principles of the "social ethic".

Possessing skill in social interaction, while maintaining shallow commitments to others, appears also to be the important technical equipment for those who play what Gouldner (1960), cited in Gross (1964), calls "boundary roles". Gouldner describes the labour relations experts who interact so extensively with both management and union that they are fully trusted by neither group. This marginality is used to advantage, however, since the labour relations people are well placed to carry trial balloons back and forth from one camp to the other without committing either side inadvertently. While marginal status is ordinarily regarded as traumatizing to the individual, these men develop skills in turning the imagined disadvantages into benefits.

We see then that interpersonal competence is an important determinant of work success - at least, in the white collar managerial world - but that the ideologies that have grown up about it are not matched by the empirical realities. While the ideology stresses empathy, cooperativeness, and the avoidance of any behaviour disruptive of the sense of team work, the reality appears to require social ease and comfort, the ability to be manipulative, and a willingness to cross the group consensus when it is required.

LEADERSHIP STYLES AND GROUP CLIMATE

In a classical experiment, White and Lippit (1953) tested for a relationship between leadership style and group climate. The only experimentally varied factor was in the style of adult leadership given to matched groups of boys, working on mask-making in a club setting. The crucial dependent variables were group productivity, the quality of the output, the ability to work when unsupervised, and the relationships among the group members. Democratic leadership resulted in high output, good quality work, continuation of task involvement even when not in the presence of the leader, group cohesiveness and a high degree of cooperation. Laissez-faire leadership elicited low output, inferior quality of work,member apathy, and low cohesiveness. The group with authoritarian leadership produced well, but only when supervised. This group was characterized by a low degree of cooperativeness, factionalism and a high degree of scapegoating of the least acceptable members. These findings represented a juncture of

prevailing North American values with the business world's desire for higher productivity and as a result have been the basis of much of the human relations ideology of supervision and management.

In a recently conducted study of claims adjusters in an insurance company, Mullen (1966) found few important connections between the leadership style of the manager and the dependent variables of interest. On the other hand, Mullen's findings did demonstrate that the managers' recruitment policy was such that there was an attempt to fill one's staff with those whose personality predispositions were most likely to be congruent with the administrative style used. Similarly, Bidwell (1955) found that teachers tended to be more satisfied when the behaviour of their principals matched the expectations that the teachers had of them, regardless of the content of these expectations insofar as which particular leadership style was used. While we intend to pursue supervisory and administrative methods under our consideration of the structural features of work organizations, we introduce this material here to point out that the efficacy of any given leadership style appears to be a function of the particular value context in which it is found. It would therefore be an error to accept the White and Lippit finding as having universal, or even extensive, applicability in North American work contexts.

COLLEAGUE RELATIONS

Oswald Hall (1948) has been the pioneer in tracing connections between interpersonal relations among doctors and important career contingencies. For those physicians aspiring to specialized practice in the major teaching hospitals, accepted entry into what Hall calls the "inner fraternity" is the necessary precondition. In addition to the possession of reasonably competent skills and ability, the young aspiring doctor needs to have an acceptable social background, and has to have cultivated relationships with the older, well-established men who run the hospital. The sponsor-protégé relationships which are formed tend to provide for the relatively smooth retirement of the older men. Hall points out that the entire process is dependent upon a willingness to practice medicine according to the inner fraternity's norms, but that even more important is the need to develop informal relationships with the key men so that inclusion in the important referral network will be assured.

In an interesting analogue to Hall's study, Kriesberg (1956) establishes a similar process among steel distributors. Here, too, there is an inner ring of successful and prestigeful men who, having stable contacts with the major suppliers and with the largest customers, are able to pursue business successfully without any major violations of the business norms. Those who wish to be included in this inner ring are similarly bound to these norms of business practice. Those who do not, or who are not socially

acceptable to the insiders, are less bound by these norms, and are therefore more likely to participate in the "gray market" for steel when supply does not keep pace with demand. Kriesberg's data indicate that colleague relations tend to reinforce whatever mode of practice is current among the particular group of distributors.

Brazeau (1965) speaks of the differential importance of informal contacts among physicians for general practitioners and for specialists. Most of the patients of general practitioners come through lay referrals and hence, in the unfolding of a career, the use of colleague contacts is not especially crucial. However, in the initial establishment of a practice, particularly one which is neighbourhood based, contacts with other doctors are important. In these cases, new general practitioners tend to be referred night and weekend calls, and less desirable patients. This dependence on other doctors declines as the newer doctor acquires and keeps more of his own patients. For the specialist, contacts with other physicians are a continuing factor in the generation of new patients since more patients are doctor-referred than self or lay-referred. However, as compared to Hall's work, Brazeau tends to play down the informal contacts, and places greater importance on the monopolistic advantage provided by the specialists' access to hospital beds and services. Even so, Brazeau points out as Hall did that membership on the hospital staff is largely dependent upon the cultivation and maintenance of extensive informal contacts with other doctors.

Freidson (1960) covers much of the same material as Brazeau. He finds that:

> The interaction among colleagues, practitioners and patient is ... a function of variable location in two sometimes conflicting systems - the lay referral system, which consists in a variable lay culture and a network of personal influence along which the patient travels on his way to the physician, and the professional referral system of medical culture and institution (p.374).

On this basis, Freidson points to two analytically extreme types of practice. Independent practice is located in the lay referral system and is primarily subject to client controls. On the other hand, dependent practice is located within the professional referral system, and is therefore subject to colleague control, and operative through the informal contacts which grow up between practitioners. It is likely that it was this view of the so-called "free, self-employed professional" that prompted Hughes to suggest that, contrary to popular belief, it is often the employed professional who is most assured of working within the context of colleague as against lay control (1960).

A different side of the question of colleague contact is discussed by Carlin (1962, pp.209-210). He notes that the practice of law is stratified with prestigious, large-office lawyers at the top and unknown, sole practitioners at the bottom. As is the case with Hall's "inner fraternity" and Kriesberg's "insiders", those at the top are most mindful of the

professional codes of ethics and the proper etiquette of practice; those at the bottom more often than not have to do whatever is required merely to survive professionally. While there are some symbolic exercises in attempting to "clean up" the nature of sole practice, it seems to Carlin that there is a gentlemen's agreement between the high-ranking and low-ranking not to interfere with one another. But because interpersonal colleague contacts would strip the high-ranking of their posture of moral rectitude, the agreement is solemnized by a kind of ritual avoidance and separation, even to the point of membership in separate Bar Associations.

Carlin also points out (pp.157-161) the importance of informal contacts for sole practitioners as a pre-condition for being able to serve the client. Particularly in the case of those laws which are unrealistic, generally unenforceable, and coupled with a wide range of administrative discretion, it is the lawyer who "knows somebody" in the right office, who is "known by the judges", and who has the "right political connections" who is best able to render some satisfaction to his client. In these instances, the cultivation of personal contacts is more important than sophisticated knowledge of the law or pleading skill.

Bucher and Strauss (1961) point out that colleague contacts are often the basis for the emergence of new medical sub-specialties and their acknowledgement as such by the entire profession. According to Bucher and Strauss, the process begins first by some aspect or aspects of

"professional identity". The persons involved share similar identities in the form of circles of colleagueship. Through associational activities, these persons come to organize their work in a manner which sets them apart from other persons in their occupation. In this way, leadership begins to manifest itself and specific procedures are developed for the conduct of their work. This leads ultimately to recognition as a separate speciality.

Finally, we note that Strauss and Rainwater (1962,pp.111-113) treat the competence of one's colleagues as a source of social reward. In a re-analysis of their data on chemists, it appears that the more homogeneous the skill level of the chemists employed in any work setting, the more likely it is that the chemist will regard his co-workers as uniformly highly competent. Homogeneity appears here to be more important than the absolute level of skills, and this would suggest that interaction with others as full-fledged colleagues is the critical intervening variable, the suggestion being that likes will be more disposed to interact in this way than unlikes.

PEER CONTACTS AND OCCUPATIONAL CHOICE

Most current research tends to indicate that the process of occupational choice for adolescents and young adults is a relatively random and almost accidental one (Slocum 1966,p.190). What patterning there does appear to be is more closely related to occupational levels than it is to specific occupations. To the extent that occupational aspirations and career planning in a purposeful sense are found to exist, the sheer amount of

education, rather than the particular subjects studied, seem to be the most important criterion. It is therefore necessary to enquire about the factors that are thought to be determinate of academic ambition - in this connection, the most consistent results to have concerned the relatively strong relationships between socio-economic class and student ambition. Parental style of life, early socialization, the cultural setting, etc., are all thought to be important factors.

Yet despite the strength of family influence, there are other factors of great importance. The Coleman findings on the various "pulls" of different school climates are now well known (1961). Less well known are some of the other studies which confirm, augment, and expand upon Coleman's linkage of school climate, interpersonal relations, and ambition levels of students.

Etzioni (1961, p.178, footnote 7) cites a then unpublished study by Riley, Riley and Moore, in which 2500 high school students in eight middle class communities were studied. Their data indicated that the great majority of students were being influenced by peers to perform well as students and to look forward to adult roles of success and achievement.

Turner, (1964) cited in Slocum (1966, p.218), studies students in ten high schools in Los Angeles and Beverly Hills. The expected association between success values and socio-economic status was found, but it was of lesser magnitude than had been anticipated. For Turner, the interesting

cases were of those students who manifested high ambition but who came from the lowest backgrounds. They were handicapped by a lack of peer relationships which could augment the future ambition with anticipatory socialization, since the manners, customs, and distinctive values of the levels aspired to were not known.

On this point, Slocum (1966,pp.215,216) cites an undocumented assertion by Sewell and Orenstein (1965) that the low aspiration levels of low status youth are to be explained by the nature of their role models. Their most intimate contacts with adults tend to be restricted to those in lower status occupational positions. However, research by Kahl (1957) and an unpublished study by Ryant (1965) indicate that not only do some low status fathers attempt to generate high occupational ambition in their children, but that they often consciously present themselves as negative role models in order to facilitate their goal.

Research by Slocum (1966,p.217), on the educational aspirations of rural high school students in Washington state, has provided limited support for the hypothesis that the higher the perceived educational orientation of the student's reference group, the higher his own educational aspirations. Of perhaps greater importance was the limited support for the hypothesis that when peer values conflict with family values in so far as educational aspirations are concerned, it is the peer group values that have greater influence. In this connection, and perhaps in recognition of this

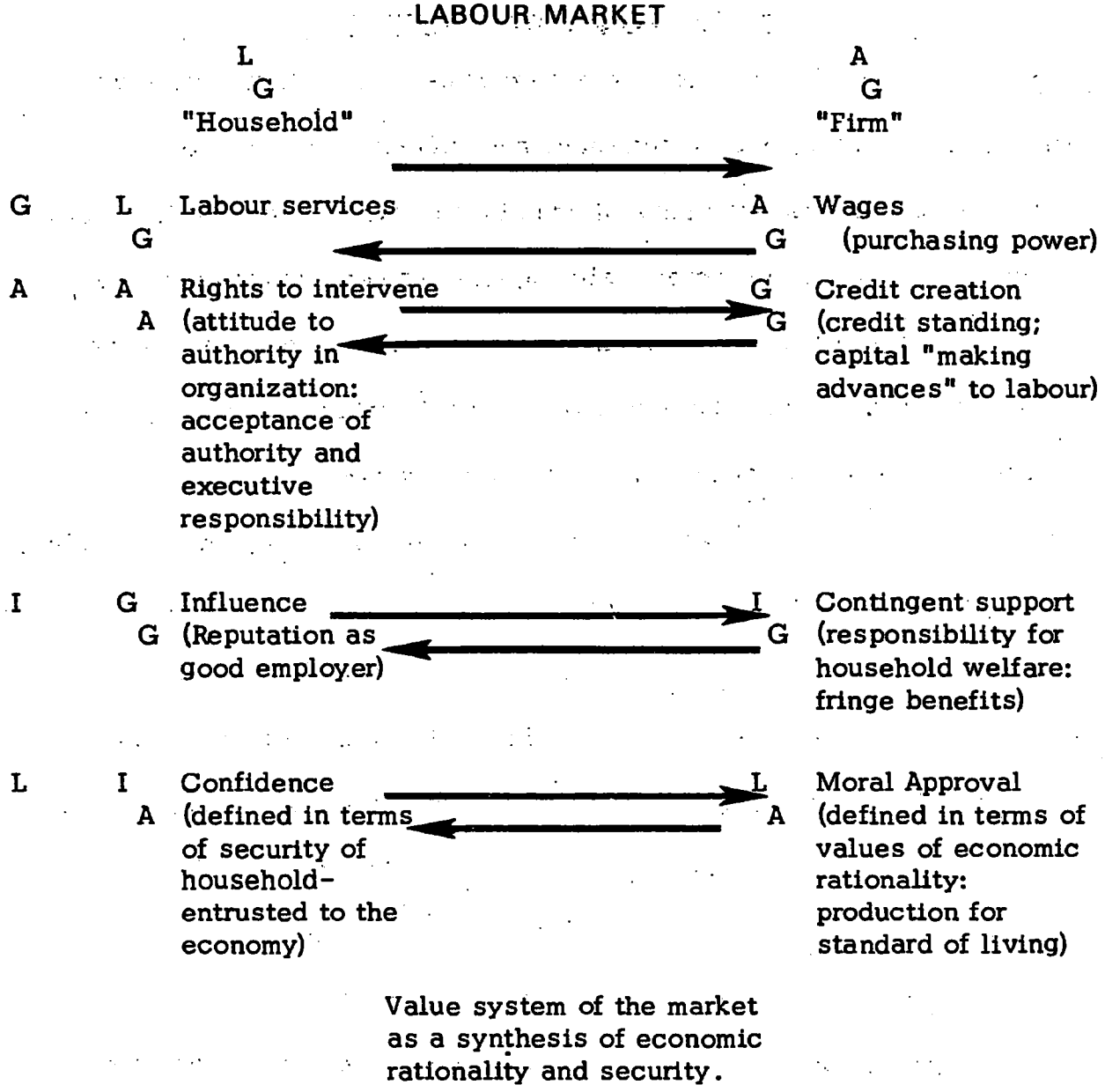
very point, Westley and Elkin found that upper-middle class metropolitan parents were unlikely to leave the peer group associations of their children to be solely determined by the youth themselves. These parents were found to intervene, albeit subtly, in both the membership and activities of their children's peer groupings and helped thereby to ensure congruence between peer and family success orientations. Westley and Elkin refer to this parental strategy as providing a "protective environment" (1956).

IV ENVIRONMENTAL FACTORS

In this section, we review some of the relevant literature which seeks to link work organizations and work-related behaviour to environmental factors. We have divided these latter into economic, socio-cultural, and community factors, although as has been pointed out in other sections, the separation is approximate and not watertight. The reader should also bear in mind that our review is of literature which treats as the dependent variables of concern those involving work-related behaviour and work-related attitudes. Were the organization itself the dependent variable, a much more extensive literature would be reported.

ECONOMIC

Parsons and Smelser (1956, p.114) define an occupational role in economic terms by their insistence upon its contractual nature. The contract covers the relationship between an organization and an individual, who is regarded as acting in a representative role as a member of a household or some other collectivity. It is their view of the occupational role as involving an economic contract which prompts them to see the labour market in the terms represented by Figure 1 (p.119).



Value system of the market as a synthesis of economic rationality and security.

It should be noted that the Parson and Smelser view of economic exchange goes far beyond the mere exchange of labour services for wages but includes the exchange of integrative and normative goods as well.

Stinchecombe (in March, ed., 1964, pp.164-166) presents a typology of work which is based primarily upon the differential marketability of types of labour. The terms and conditions of the work contract, and the ease with which each party to it may operate, are the premises underlying the 5 criteria which he presents. The criteria are:

> (a) the nature and quality of preparation for work roles outside employing organizations, particularly in schools,
>
> (b) the organization of licencing agencies and practices,
>
> (c) the nature of organized groups which determine the norms of the employment contract, such as unions and professional associations,
>
> d) the manner in which particular jobs are (or are not) integrated into careers in which the quality of current performance affects future statuses,
>
> (e) the structure of competition for labour, or looking at it from the view-point of the individual, the range of alternatives open to people occupying particular statuses (p. 164).

Applying these criteria, Stinchecombe sets forth the following paradigm (adapted from pp.164-165).

	I	II	III	IV	V
	Workers tied to Kin or Family Enterprise	Workers in Bureaucratic Organizations	Workers in Craft Organized Settings	Workers in Mass Industrial Settings	Workers in Service Occupations (non-craft)
(a)	Workers prepared in family or in empirical socialization in other business organizations	Preparation for work in schools	Union-supervised apprenticeships in firms of the crafts	Preparation for work generally not organized, but training is for particular firms	No special institutions for training
(b)	No licencing or educational qualifications	Qualifications judged by employer without government licencing	Unions certify competence and control access to work	No licencing or certification except by employer himself	Workers are not licenced
(c)	No organized groups mediating between family members	Employees are unorganized	Unions set the conditions of employment within wide limits	Employment conditions bargained between union and management	No organized groups between employee and employer
(d)	Career by tying fate of individual to that of family enterprise	Career is within a particular organization and is not tied to ownership	Careers are within the occupation and not a particular firm	Particular jobs not usually part of a career. Employer generally does not guarantee permanent employ-ment or advance-ment	Careers generally do not exist
(e)	Skills and estates rarely transferable to other enterprises	Range of alternatives usually limited by the stake	Alternative employment on same terms and conditions	There is much movement between factories by	Labour moves freely from one employer to another

built up in organization but more highly qualified have more cosmopolitan careers	generally available	workers; also movement in and out of this sector of the labour market

Wilensky (1956,p.232) uses marketability to account for the independence and influence of the professional employed by labour unions. First using the private consultant as a prototypical case, he notes that the more diversified his practice, the more easily he can maintain a professional-client relationship. His high prestige is associated with his outside contacts and his high fees, and is supported by his income and style of life. All this adds to an independence which permits greater objectivity and, supposedly, greater influence. The same factors which affect the outside consultant are found by Wilensky to differentiate among employed professionals - easily transferred skills, outside contacts, and a variety of acceptable alternative job opportunities.

Carlin (1962,pp.142-145) treats the situation of the sole law practitioner as an outcome of his vulnerability to lay competition for clients. Particularly in the real estate, business-corporate, and will-probate-estate fields is the independent lawyer subject to the competition of trust companies and banks, real estate brokers, accountants, etc. Carlin enumerates several reasons for this being so: (1) rationality, convenience and efficiency of their operations based on the volume of work which they do enables specialization and subdivision; (2) their more inclusive relationship with a client is a matter in which the legal aspect is but one part,places them in a position of market power; (3) they are more visible to the client, being allowed to advertise and to ethically solicit business;

(4) because their operations are rationalized, they can often give equivalent service at lower cost.

Carlin finds that these factors, plus the frequent "one-shot" nature of the need for legal services, place the lawyer in a disadvantaged market situation in which he has to use brokers - policemen, doctors, ambulance attendants, other lawyers - to find him business. The broker-lawyer relationship is on a quid pro quo basis. Carlin suggests that lawyers do not compete as much for clients as they do for brokers (pp.147-148).

Smigel (1964,pp.346-347) uses both economic and community factors to account for the organizational structure of large law firms. Differences in firm structure were accounted for by the number and size of the clients served by a given firm. The larger the number, and the smaller the size of client firms, the more the law firm structure tended to take the form of "small firms within large firms". Law firms with fewer clients of larger size tended to be structured more along formal and impersonal lines. Smigel also found that, outside of New York City, community custom would often determine whether a given type of work would be handled by a law firm or, for example, a bank.

Dubin (1958,Chap.7) discusses five institutional limits on managerial decision making, the last four of which are clearly economic. He suggests that the boundaries of managerial action are constituted by

(1) the legal system; (2) the complex interdependencies which limit the action of individual companies or individual industries; (3) the method of industrial financing which provides a brake on possible improvident action; (4) consumer resistances to certain changes; and (5) the contract with the labour union.

Goode (1967, pp.10-13) is able to account for the extent to which the inept will be protected by introducing, among others, economic factors. The protection of worker ineptitude increases when: (1) there is so high a demand for a given set of services that the organization or collectivity has difficulty in recruitment; (2) there is a low supply of services, output or candidates, especially in socially useful but not highly rewarded categories, and the necessity of the service makes demand somewhat inelastic so that it doesn't fall in a matched response to low supply; (3) stringent enforcement of efficiency norms creates problems in the socio-political structure; and (4) there are positive consequences - loyalty, for example, accruing to the superior for the protection of the subordinate. However, an economic consequence of protecting ineptitude too well may be not surviving the competition from those at the same level (p.14).

Heberle (1948) discusses some of the social consequences of the late industrialization of the urban South. Its effects on ecology were the encircling of a rural non-farm population by a working class population located in a ring about industry which, being late in arriving, had to place

itself on the periphery of the city. This also had the effect of exacerbating the even then pronounced spatial segregation between Negroes and whites. There were also telling effects upon social stratification. The old upper class was supplanted by new industrialists. Social distance between the classes increased. An urban white permanent working class emerged, and old paternalistic patterns vis-a-vis Negroes began to break down under the strain of industrial rationality.

SOCIO-CULTURAL

Our concern here is with the features of the wider social structure and the environing culture that shape, determine, or at the very least impinge upon, the work organization and work-related behaviour. Some of the topics covered will be the meaning of work, public legitimacy of work organizations, cultural differences in the definition of work and of organizations, professions as broad social mandates, etc.

We may begin with the Morse and Weiss study on meanings of work (summarized in part in Nosow and Form, 1962, pp.29-35). Using the national U.S. sample of 401 men, their key question was something like "What would you do if you were no longer required to work?" The exact wording of the question made it clear to the respondents that their financial needs were presumed to be met. They found that work has meanings other than financial remuneration, but that there was significant difference between the working class and the middle class. The men gave both negative and

positive reasons for wanting to continue work, ranging from fear of idleness (classified as negative) to wanting to be associated with people (classified as positive). For working class men, work tended to be valued for its activity value, that is, for its keeping the man active. For men in middle class occupations, the more typical answer was that it was the intrinsic nature of the work task that was thought to be rewarding. Morse and Weiss also found that there was no single definition of work satisfaction which cut across classes. The meanings attached to work satisfaction tended to be clustered within occupational categories.

Inkeles, in a secondary analysis of data gathered in a number of industrialized countries, states that "evidence is powerful and unmistakable that satisfaction with one's job is differentially experienced by those in the several standard occupational positions. From country to country, we observe a clear positive correlation between the over-all status of occupations and the experience of satisfaction in them" (1960,p.12). Inkeles also found that the same differential experience of satisfaction with the job held for components - pay, for example - of the job, but here the data indicated that American workers, at whatever pay level, tended to be more satisfied with their income than workers in other countries. Cross-nationally, workers appeared to favour security above pay increases at the risk of security, but Inkeles found that if success or advancement was guaranteed, a greater propensity for risk-taking was triggered (pp.12-13). Inkeles' conclusion,

based upon the same relative ranking of workers, on the various questions regardless of country in which the data were gathered, was that the factory system and large scale bureaucratic organization produce standardized contexts of experience which imprint the culture of the system on the workers in approximately the same way, and therefore that "industrial man" should be expected to relate status to experience, perceptions and values in approximately the same way regardless of the overlay of national culture. Further corroboration is given to this conclusion by the Inkeles and Bauer study of Soviet emigrants. They state,

> ... we cannot but be struck by the degree to which its (The Soviet Union) features resemble those of most Western Industrial nations. The Soviet factory and large scale farm have substantially the same structure of authority relations as a large factory or farm in Europe or America. The role of technical competence and the pattern of economic reward is very similar in both places. It follows, then, as we have seen, that the relative evaluations of work experiences ... should be similar in important respects to the relative evaluations of their experiences by appropriate 'opposite numbers' in Europe and the United States (1961,p.125).

Inkeles and Bauer suggest that those uniquely Soviet features noted in the various response patterns will decline as the more general characteristics of modern society become more important.

Landes (in E.E. Meade, 1951) considers the cultural characteristics of a given country to be far more determinate of differences than has heretofore been suggested. To the question "Why is French business so conservative and static?" Landes answers that it is fundamentally culture that is responsible. He holds that the social structure and cultural patterns of France enforce that type of business pattern. Also in French study, Crozier (1964,p.282) concurs that the high value placed on absolute authority together with the idealization of individual mastery and self-control, and a genuine feeling of equality - all of which are part of the French culture - is responsible for the particular shape of both bureaucratic involvement and entrepreneurial activity in France.

Similarly, Dalton (1959,pp.264-266) suggests that bureaucratic theory is largely inapplicable in the United States for reasons embedded in the American social structure and culture. We reproduce his argument in some detail since much of it is so germane to the factors under consideration in this paper. (1) American values concerning equality militate against norms of impersonal selection and treatment, and against authority being vested only in office. (2) Bureaucratic theory assumes the individual to be more passive and inert than he is in fact. Rule-following tends, in American culture, to become subordinated to the seeking of individual self-interest. (3) In large organizations, local and personal demands take precedence over the demands of the larger unit. Rather than the expected loyalty being to the "organization" first, it is more likely that loyalty is first to the department, then the division,

and only finally to total unit. Organization response to this often becomes progressively unbureaucratic as new controls are developed for the wrong reasons. (4) Bureaucratic theorists tend to underestimate the ability and the will of subordinates to adjust rules and procedures to their own benefit. American values favour "getting around rules", contempt for both formalism and elitism. Where values do favour bureaucratic control, it is for levels below one's own. (5) Expanding organizations often require arbitrary and autocratic action despite the stress on democratic equalitarianism. Dalton holds that bureaucracies which recruit impersonally and contain their members in well-defined roles are compromised equally by both autocratic and democratic pressures. (6) Some problems cannot be solved by the formally related chart of officers but by cross-cutting cliques which, while effective, give the lie to the bureaucratic structure of authority and relationships. Informally evolved cliques appear also to be deeply engrained in the American cultural pattern.

Another particularly American pattern is the public acceptance of the legitimacy of "big business". Gross (in Faris, 1964, pp.635-640) reports research on this to the effect that, even in the Depression, 75 per cent of those polled gave favourable responses to the question asking whether big business concerns were good or bad for the country. Similar results were found in studies conducted in the 1950's; 76 per cent believed that the advantages of big business outweighed the disadvantages; only 13

per cent felt that big business was the most powerful of the group, which included small business, labour unions, state governments, and national government. Considered as employers, 46 per cent believed that big business pays higher wages than small business; 53 per cent felt that it provided more job security; and 78 per cent believed that it helped to create jobs. The balance of opinion on big business was favourable despite the fact that 71 per cent found big business profits excessive. This latter finding may suggest that the consumer role is not as salient as is the role of wage-earner for high prices, even excessively inflated, can apparently be tolerated when job security, job opportunity and level of wages are protected.

Goode (1967, p.5) suggests that the inept are protected for reasons embedded in a socio-cultural matrix. He feels that patterns of protection are not so much an evasion of achievement norms as they are an honouring of other cherished values and beliefs: loyalty and cooperativeness from the protected; welfare concerns and humanitarianism from the protectors.

In a comparison of Crozier's description of the French bureaucracy and various studies of the Japanese and American systems, Goode suggests that the French system reaps the least benefit from its protection of ineptitude, and the American system the most. The crucial element appears not to be protection per se but efficient utilization as well. He concludes that similar types of structure, located in different cultural systems, may

give more or less protection to the inept, and offer more or less protection from the inept (1967, pp.17-19).

Weber (in Gerth and Mills, 1958, p.201) suggested that the demand for trained competence in public administration was a force in the public opinion of the United States, which was mitigated only in large cities where immigrant votes were "corralled". This demand weakened the dependence of the officials on the political hierarchy and was thought to ensure qualitatively better service. But, realizing the incapacity of so nebulous a factor as public opinion in the judgement of competence, Weber suggested that even politically appointed judges were superior in qualifications and integrity to elected judges. Weber held that the changes in public opinion that led to the desire for competence and honesty grew out of the reform wave instituted by the "muck rakers" who attacked the excesses associated with political hacks appointed by the elected officers.

The deeply engrained pattern of particularism in American culture is revealed in a study by Dalton (1956) of 226 careers in a managerial hierarchy. The data indicate that there was no formal pattern of selection in terms of age at entry, rate of advancement, occupational experience, or type of educational training. The significant processes appeared to be informal, based on such criteria as religion, ethnic group membership, political beliefs, and participation in accepted organizations. Since approximately three quarters of the positions examined were at the level of foreman and production

superintendent, the reader may well ask if the application of particularistic criteria would not have been even more extensive had only non-production, white collar jobs been studied. Against this supposition, one must keep in mind that educational requirements would probably be more salient at this level.

Blauner (in Simpson and Simpson, 1964,pp.282-292) suggests that there are four major factors, one of which is clearly socio-cultural, which account for differences in occupational satisfaction. In addition to the socio-culturally determined occupational prestige, we also have control, integrated work groups, and the existence of occupational communities.

Several studies examine the culturally-based educational system as determinate of work outcomes. Slocum (1966,p.157) suggests that the disparity between the language of the poor and the language used by the teacher may tend to be a deterrent to social mobility. This would be particularly so when a given country has a lower-class language structure widely at variance with that of the middle classes, for example Great Britain.

Weil (1952,pp.68-71) suggests that industrialized countries build certain assumptions into their educational systems, the outcome of which is rootlessness for the lower level student. It is assumed that the working classes are too fatigued to learn. It is assumed that truth is stratified, and that upper stratum truth should be shared only with upper

stratum children. It is assumed that theoretically based material, for example geometry, cannot be translated into the average conditions of human labour. Finally, it is assumed that there should exist a social distance between the intellectuals and the workers. Weil asserts that to give up these assumptions is to provide an educational system which can provide roots through the general culture.

Crozier (1964,pp.238-239) suggests that the educational system of a given society both reflects its social system and acts as the main force perpetuating it. It is a powerful form of social control and a model of future social relationships. The main characteristic patterns of the French bureaucratic system are held by Crozier to be duplicated in the educational system - a highly centralized and impersonal organizational structure, extreme social distance between teacher and students, learning content which is abstract and divorced from actual life requirements, and finally, preparation of students more for entry into particular social strata than for future productive functions.

Slocum (1966) presents some data which bear on the American emphasis on occupational and social mobility. In a contrast between Americans and Europeans, he suggests that American "openness" and readiness to be hospitable, friendly, and accepting of others at face value have generated patterns of interpersonal relations which make mobility a less personally traumatizing experience for those who move from the cultural

milieu of one social class to another (pp.164-165). Notwithstanding this, it is still the case that movement from one's father's occupational level is largely patterned. Citing a study by Blau (ASR, August, 1965), it is reported that mobility patterns for the low status and high status are quite different. Sons of low status and high status are quite different. Sons of low status fathers tend to begin their work in an occupation with a status similar to that of their fathers, although many later obtain higher level occupations. On the other hand, those with fathers in high status occupations tend to begin their work lives in positions at levels considerably below those of their fathers, and tend to move upward during the course of their labour force participation (pp.168-169). Insofar as adult education is a contingency for occupational mobility, its use tends to reinforce existing patterns rather than unleash new mobility. Slocum cites a study by Johnson and Rivera (1965) in which it is reported that the typical adult education student is young, urban and fairly well educated, and that adults with relatively poor education and with low status occupations seldom aspire to participate in these programs unless they can see some immediate, tangible, advantage (p.197).

Socio-cultural factors are, according to Slocum, also largely responsible for the process of occupation choice-making. The opportunity structure is perceived through a screen of past experiences, past and present associations, and the values one has come to accept. There appears to be no structural mechanism in the society to make all types of occupational

information available to all levels of social system, nor is there any guarantee as to the meaningfulness of this information were it made generally available (1966, pp.200-201). It is for this reason, perhaps, that most of the available evidence points to occupational choice being situational in character, and to being closer to the choice of a particular employment than to the choice of an occupation (p.206).

We turn now to one of the best institutionalized of all the socio-cultural phenomena associated with work - the professions. Since one of the hallmarks of true professionalism is the public's acceptance of their own incapacity to judge competence, professional activity has to be properly seen as embedded in a matrix of cultural norms, supported by appropriate institutions. MacIver (in Vollmer and Mills, 1966) maintained that a key characteristic of professional groups was the degree to which they established autonomy and collective self-control over the standards of performance and behaviour. He pointed out that whereas it is characteristic of all social groups to develop ethics, norms or standards of behaviour governing the relationships of members with other members, professional groups are different in that they develop ethics and standards with regard to relations with those <u>outside</u> the group.

In a definitive article on professions, Goode (1957) raises some of the problem areas and some of the offsetting advantages created for a society which cedes its right to judge its professionals. Goode suggests

that society obtains indirect control by yielding direct control. Discipline is maintained by the professional community for fear of loss of prestige and of autonomy. Client choices, if uncontrolled, would affect survival and success. If professionals alone are competent to judge, ideals of service seem to be violated in not informing the public of professional evaluations. Such data are seldom available for the profession will not rank its members for society at large. Public ranking would transfer control to others, generally ruining those at the bottom. Each community would then have to offer excessive rewards for talented recruits to replenish the supply of professionals. Moreover, if a number of professions were simultaneously in need of replenishment, the community could not likely meet the demand.

Wilensky (1956, pp.234-236) deals with the inordinate influence of the union-employed lawyer, and accounts for it in terms of what society normally grants to this profession - the mystery of the law, the fiduciary and structurally confidential relationship, the position of the lawyer in the larger society - in addition to the pervasiveness of labour law.

Howard Becker (quoted in Slocum, 1966, pp.120-121) goes so far as to make public acknowledgement of professional status as the primary criterion of what occupation is and what occupation is not a profession. He suggests that professions are merely those occupations which have been fortunate enough to gain and maintain possession of that honorific title. It is therefore unnecessary to think of "true profession" or to attach to the

title any special set of work characteristics like theoretically based skill, fiduciary obligation to client, etc., etc. There are merely those work groups that are commonly regarded as professions, and those which are not.

Everett Hughes, perhaps the father of Becker's thought, points out that professionalization, thus conceived, serves as a mechanism not only for the mobility of certain individuals but for entire occupational groups. Professionalization is therefore an important ingredient in the "open society" but it also contributes to intergroup conflicts where ethnic or racial caste barriers restrain career mobilities for certain minority groups (1960).

Also writing in the Hughesian tradition are Strauss and Rainwater (1962,pp.213-214) who point out that the complaints and hostility of chemists are directed principally against the general public, which they feel denies them true professional recognition, as well as against those above them in the hierarchy of the work organization. A comparison of complaints directed against colleagues and against the external world shows more complaints to be directed against the external world. Strauss and Rainwater feel that the major thrust toward the chemists' appropriation of professional title and toward public recognition of the discipline as a profession comes from men who are located outside the college and university campuses, where the designation "scientist" is sufficiently understood and rewarded (pp.223-225). The more chemistry moves into the world of industry and commerce, where the meaning of the scientific designation gets

blunted, the more the claim to chemistry being a profession will be made (pp.228-229).

COMMUNITY

Some evidence is available which suggests relationships between conditions in the community and work-related behaviour. We shall cite some of this evidence.

Kerr and Siegel suggest that the most general explanation of differences in the interindustry propensity tc strike is the nature of the industrial environment. Particularly important is whether a given industrial environment will direct workers into masses or integrate them into the general community. They hypothesize that the most strike-prone industries are those in which the workers are not integrated into the general community, where they have formed an isolated mass, where there is a sense of mass grievance against society, and where there is little sense of community responsibility. The suggestion put forth by Kerr and Siegel is that in such a situation, the cost of striking is reduced, for there is more group support for the strike, and less felt public pressure against it. These strikes may have as much the element of small-scale revolt as they have objectively sought economic goals (in Kornhauser et al., 1954, pp.189-212).

Lipset suggests that size of community is highly correlated with leftist voting (1963, pp.262-267). In cases drawn from a number of countries, the proportion of left voting goes up as the size of the community

increases. However, in a finding consistent with the Kerr and Siegel material, left voting tends to be highest in isolated, small communities like those of miners, fishermen, and loggers.

Mack (1954) describes the spatial segregation of workers of Italian and Scandinavian descent in both a railway maintenance shop and in the community. The division of labour, assignment of tasks, and work arrangements along the lines of ethnic group membership had no basis in rationality, and violated business norms for efficient utilization of the labour force. Mack suggests that just as the segregation in living areas is functional at the community level in warding off possible conflict, so too is it functional at work. The work place can be conceived, then, as an exact analogue of the community's pattern of relationships between ethnic groups.

Hart (1949, pp.59-60) studies power relations in Windsor, Ontario. In the city of Windsor, Hart finds that there is no community as such; there are only various power groups in a fairly constant state of competition and, at times, open warfare. The four power groups identified are (1) big business, e.g. the automobile makers, (2) the Roman Catholic Church, (3) the union, and (4) local business group, or as Hart calls them, the Chamber of Commerce group. Since these four groups seem to include everyone in Windsor, there is no residual general public at large as there might be in other cities. Hart suggests that, in Windsor, it is the absence of this fifth group - a general public - that is so largely responsible

for the tensions and bitterness evident at the time of the study. The conflicts between the power groups tend to be naked and overt since there is no group of so-called neutral bystanders to mask them.

Goode, in an empirical study of librarians' claims to professional status, suggests that it is the apparent acceptance of their vulnerability to community control that is partially responsible for their not being professionals. Goode notes that it is the community which either accedes or not to an occupation's claim to professional status, and that high community rank is unlikely to be forthcoming for occupations which bow to censorship demands and have no professional code to promulgate over political expediency (in Vollmer and Mills, 1966). Vulnerability to the community definition of occupational role is also the theme of a study of teachers by Terrien (1955). The 100 teachers in his sample were highly conscious of the community definition of their role, and were not well enough structurally attached to the adult community to do much to change or improve the definition.

Finally, we may turn to a brief consideration of the relationships between community support and organizational decision-making. Gross (in Faris, 1964, p.639) suggests that what an organization can do is a function of what the community, or elements within it, wants done or can be persuaded to support. Goal setting, to the extent that it impinges on the boundary between the community and the organization, becomes a dynamic problem

which raises questions about both organizational strategy and organizational legitimacy. Thompson and McEwen (1958) review the problem of strategy. The environment exercises control over goals through processes of competition and for cooperation. Competition implies that a third party is involved in the resolution of the issue, for example, whether it patronizes a given organization or its rival. Cooperation involves different processes each of which implies a different amount of organizational autonomy being ceded away. Bargaining, because it is specific and most limited in goals, necessitates the smallest organizational concession. Co-opting (see Selznick, 1949) implies more, and coalition implies the most. To be successful, the organization must find which of these means is to be used in any given instance. Like Thompson and McEwan, Etzioni (1961,pp.85-87) sees the environment as affecting the choice and salience of organizational goals, and the range and type of power-means which the organization may use to achieve them. When goals and compliance structures are not congruent, Etzioni holds that it is due to environmental pressure on the choice of goal, or on the means used to attain it. If the organization was not constrained by its environment, its goals and compliance structures would be in line. Having them out of line reduces organizational effectiveness, thereby giving rise to pressures to bring them into line. Bringing goals and the compliance structures into line involves moving the goals, or the compliance structures, or the constraining forces in the community.

V INTRAPERSONAL FACTORS

In this section we shall review what the literature reports on the effects of intrapersonal factors on work-related behaviour. We should recall that it is our intention here to cover not only the social psychological variations that serve as determinants, but antecedent life experiences as well. The material has been roughly divided into sections on formal socialization experiences, personality factors (insofar as sociologists report them), aspects of life history, personal orientations to work roles, aspirations, levels and types of commitment to types of work and to work organizations, congruities and incongruities between personal expectations and work realities, and adaptive mechanisms. The focus will be to treat each major category as including the independent variables of interest.

SOCIALIZATION

The general problem here is to describe the process whereby the individual is taught to participate in a formal work role (an occupation) as the major means of meeting his, and his family's, subsistence needs. Parsons and Smelser (1956, pp.121-123) provide the best abstract statement on the process, seeing occupational socialization as proceeding through a series of stages, each linked to the appropriate institutions, which takes the individual from the most general to the most specific state of preparedness. In their paradigm, it is the family which provides the primary-socialized motivation, the school which is most responsible for generalized performance

capacity and trained capacity, and the firm which provides the specific preparation required for utilization in assigned task performance. Different institutions are therefore important at different stages of the process.

The role of the school as a socializing agency for work organizations has received a great deal of attention. However, few concrete connections have been found to exist between the content of school training and the content of required work performance. Anderson (personal communication, April, 1967) reports that the most obvious connection is that between the amount of education and the level of occupational employment. Slocum (1966, p.146) similarly remarks that employers place more weight on the possession of academic certificates than on the content of the education acquired in their attainment. Wilensky (personal communications, May, 1967) corroborates this, feeling that what the employers want is discipline, responsibility, and reliability, and that they regard the education system as best ensuring that these factors are built into the student. The important corollary is that employers assume that the longer one's participation in formal education, the more likely it is that one will be disciplined, reliable, and responsible.

There are others, however, who, while they do not regard educational content as being of great importance to employers, still see important similarities between the organization of the school and the organization of the work place. Slocum (1966, pp.15, 146) believes that the

student role is essentially of the same quality and type as the worker role, and that therefore the student automatically learns to be a worker (given productivity in exchange for given rewards) merely by playing the student role. Slocum also cites Turner (in Halsey, Floud and Anderson, 1961) who treats the competition for grades and academic achievement - "contest mobility" - as being realistic preparation for the merit system of earning rewards in work life (1966,p.145).

Insofar as participation in school is determinant of aspiration levels, it is also related to occupational choice. Slocum (1966,pp.221-222) cites evidence by Burchinal (1962) and by Ellis and Lane (1963) to demonstrate some of the links. Burchinal finds that the students' expectations of success and the generation of aspiration levels derive in part from their perceptions of teachers' evaluations. Ellis and Lane found that for undergraduates from low socio-economic backgrounds, high school teachers were highly influential in the decision to attend university; 85% of the sample, chosen at Stanford University, made this evaluation, and 33% reported their high school teachers as having been the most influential persons. Slocum reports that his own research has indicated that students with high grades and high activity levels in extracurricular activities generally have higher levels of educational and occupational aspiration. Numerous connections have also been established between the nature of the school training and preparedness to perform a given type of work. This is most obviously the case in most technical, scientific, and/or professional occupations. Despite the

self-evidence of this assertion, there are reports of how objective variations in occupationally linked educational programs produce significant variations in the ability to perform the work involved. In the case of lawyers, for example, Smigel (1964, pp.252-255) reports on the functional importance of work on the Law Review for those working in Wall Street law offices, the essential nature of the work being the same in both settings. Similarly, Lortie (1959) reports that different types of law schools launch their graduates into different types of practice for which they are, by virtue of their training, best prepared. University-affiliated schools best suit their graduates for legal firms whereas independent schools prepare their graduates more adequately for independent practice. This has been substantiated by Carlin (1966) whose "sole practitioners" were almost exclusively the products of independent law schools, frequently night schools. Lortie suggests that the congruity between type of school and type of practice comes about in the continuity of the teacher role with employer roles: the legal firm partner often plays the same role vis-a-vis new employees as did the teachers; while the teachers in the independent schools, themselves engaged in private practice, emphasized the "tricks of the trade" to their students.

We have already made brief reference to the connection between the amount of education attained and the level of labour force participation allowed the workers. Slocum (1966, p.183) sums up the available

literature, stating that only those with a college education have high prospects of an orderly work history, but in this assessment he appears to underestimate the orderliness afforded by crafts training. Stinchecombe (1959, pp.68-69), in a study of a craft-organized industry, finds that technical occupational socialization, when it is accompanied by publicly recognized work competence, induces internalized work standards and procedures, and results in a professionalized work status for the craftsmen.

In his study of the American military, Janowitz (1960) finds that for the career officer, the important determinants of the shape of one's career are attendance at a military academy, modal academic performance accompanied by high athletic achievement, plus intermittent interruptions of active duty for post-graduate educational training at the higher military colleges. Janowitz provides excellent data on the socializational process of the military academy, which builds the culture of the military into the personality organization of the cadet, provides him with a continuing source of peer contact, and, most obviously, gives him the necessary military expertise. Dornbusch (1955) corroborates the data on military academics, also adding material on how the Coast Guard Academy, representing a non-combatant service, inculcates its cadets with a more bureaucratic orientation than do the other, more militant, service academies.

In the "high-commitment" occupations - for example the professions, the military, and the church - there is an extensive literature

on the socialization process. Until very recently, the traditional sociological approach has been to assume a "stripping process", a replacement of the old, non-occupationally valid, self-image with a new one. In other words, the specific socialization outcome in these high-commitment occupations was thought to be a fundamental transformation of self. This assumption is now questioned by Becker et al. (1961), with the discovery that the adoption by medical students of short-run, situationally-relevant perspectives was more typical than a radical transformation of self. The implication, which requires more extensive investigation, is that even in the high-commitment occupations the important socialization outcome is the ability to make short-run situational adaptations in response to various objective contingencies. There is a close analogy between this view and the work of Riesman, Glazer, and Denney (1950) and of Dalton (1959).

PERSONALITY

While our coverage here is by no means complete, we do intend to review four different treatments of personality as causative factors in work-related behaviour. Our major subdivisions are personality needs, personality types, intrapersonal organization and personality's function as a screen for perceptions and decision-making.

Personality Needs

Much of the work based upon personality needs tends to be presumptive in character, often not demonstrating in an acceptable fashion that what is assumed to be needed is so in fact. This shortcoming, plus

the fact that it is usually most evident in work of a programmatic nature, often leaves the findings open to the criticism of ideological bias. Notwithstanding these cautions, there is an extensive literature which accounts for worker reactions to, and behaviour in, the work place by means of to what extent, and in what ways, the work organization responds to basic personality needs.

One such presumed need is the need for self-actualization, a term introduced by Maslow and extensively used by Argyris (1957). The theory postulates that the individual's maturation process from infancy to adulthood brings him from a state of dependency on others to independence; from passivity to self-initiative; from possessing a limited set of responses to having a wide repertoire of possible responses; from having shallow, casual and erratic interests to having deeper interests; from having a short time perspective to a long one; from subordination to others to superordination over and/or equality with others; and from unawareness of self to self-awareness and self-control. If any work organization places the adult individual in a situation where he is once again dependent, subordinate, submissive, and unable to be self-activating, then the worker is denied the ability to make full use of his status as an adult. Since it is in the nature of most work organizations to be formally organized, directively led, and managerially controlled, the amount of self-actualization permitted is thought to be below the level sought, and indeed required, and negative

consequences - absenteeism, turnover, worker defensiveness and apathy, negatively-orientated work groups, etc. - will accrue. Moreover, the degree to which the individual worker cannot be self-actualizing is thought to increase as one goes down the organizational chain of command with the lower ranks and as the organization takes on more aspects of mass production (Argyris, in Bell, 1967, pp.208-210).

This approach - called by its critics the personality vs. organization school - has been roundly criticized by Gross (1965, pp.138-146) whose conclusions are as follows: firstly, Gross believes the theory to overemphasize the tyranny of the large organization, noting that controls are implicit in all of social life and are most extensive not in the specific contractual element of the work organization but rather in the small diffuse groups represented by family, friends, and community webs of participation. By contrast, organizational rules reduce the tyranny by delimiting specific areas of their application, and specific standards of performance beyond which claims for further involvement cannot be made. Secondly, Gross suggests that the organizational limitations on personal freedom and autonomy are exaggerated because of incorrect historical comparisons which, for example, compare the "best" of the medieval period with the "worst" of our own. Third, Gross points out that the theory starts where it ought to finish, that is, that the need for self-actualization has never been empirically established. Moreover, the theorists' idealization of the types of jobs

which are thought to produce the most self-actualization tend to have empirically produced what Gross describes as the worst "mental health bets" - anxiety-ridden executives, professionals and creative persons. Fourth, Gross asks why one should assume, even if self-actualization is important, that it is sought in work rather than in family and community life. Fifth, Gross states that the theory underemphasized economic rewards and treats them as almost irrelevant. Finally, Gross assesses self-actualization theory as a disguised democratic ideology which is justified on the grounds of supposed, but never demonstrated, greater efficiency.

In light of this devasting attack, it is interesting and important, that Argyris (in Bell, 1967, pp.208-217) himself cannot demonstrate that there are differences in the self-actualization needs of high skill and low skill employees in a plant which he investigated, despite the profound and significant differences found between these workers on reported work satisfaction and on individual predispositions to rewards in the work situation. Both groups of workers sought to maintain shallow and superficial relationships with the employing organization, defining the desirable relationship between the company and themselves as purely contractual. In order of importance to these employees was wages, job security, job control, non-involvement, and togetherness - a far cry from the list of needs predicted by the theory.

A second presumed need is the "need for roots" discussed by Simone Weil (1952). Based in large part on the alienating consequences of her own employment in an assembly-line automobile plant, Weil locates uprootedness in the very organization of a large-scale, capitalistic, industrialized society in which the worker has reduced authority, limited discretion and autonomy, non-ownership of his tools, earning power only on the basis of productivity and a means-oriented education. Weil's solution, however philosophically pleasing it may be to some, is nothing less than the complete transformation of the educational and economic sub-systems of the society. Notwithstanding the generality of Weil's claims, and the revolutionary nature of her solutions, it should be recalled (from the section on technology) that worker satisfaction was found to vary with amounts of discretion, autonomy, and self-direction. Whether we are justified in claiming these to be "needs" is, however, another question.

The need for self-esteem tends to be generally accepted by sociologists as an orienting mechanism for human behaviour. Like some of the other "needs" discussed, its empirical presence is not unquestionably established but more research mileage appears to have been derived from this assumption than from those previously discussed. Since self-esteem is largely a by-product of the esteem received from other parties, most of the literature on group influences, conformity, informal sanctions, etc., tends to be based on the need for self-esteem. Rushing (1964) treats self-esteem

as a major motivational force in the behaviour of the para-medical professionals employed in a psychiatric hospital. Strauss and Rainwater (1962, p.170-171), in their study of chemists, discuss the need for self-esteem as determinant of the type of reaction the chemist will have to the organizational definition of his employment. In a setting such as the university or basic research establishment, the acceptance and encouragement of basic research allows the chemist to meet his needs for self-esteem through the maintenance of a "scientist" identification. In an industrial or governmental setting, the concentration on applied research, and the evaluative criterion of profit-making or goal-achievement, causes the chemist to assuage his needs for self-esteem by moving to a self-identification of "professional". Westley (1953) in a study of the police, explains their use of violence as an illegal means to achieve the high status which is otherwise denied them. Their needs for self-esteem are particularly important in accounting for their brutality to marginal criminals of lower status - sex deviants and minor felons - since it coerces respect and improves their enforcement record for the public at large. Slocum (1966, pp.214-215) reports two studies which find close associations between intellectual self-concept and occupational aspiration levels. He states that Herriot (Harvard Educational Review, Vol. 33, No. 2) and Brookover (1965) found that the higher the self-appraisal of intellectual ability, the higher the level of occupational aspiration.

The last presumed personality need to be considered is the need for internal self-consistency. March and Simon (1958, pp. 93-95) offer several hypotheses which use this need to determine satisfaction levels, and ultimately whether or not a given job will be maintained. They state that the greater the conformity of the job characteristics to the self-characterization held by the individual, the higher the level of satisfaction; and that the greater the compatibility of work requirements with the requirements of other roles, the higher the level of satisfaction. Level of satisfaction is one of the several factors used to determine whether one will leave one's job or stay. The presumed need for self-consistency is also the concept which underlies Lenski's status crystallization argument, the voting-for-change pattern being treated as the political expression of the need to reconstruct the social order so that one's rights and privileges will be in line (1954).

Personality Types

The work in this area which we report deals largely with self-selection into occupations and work organizations which are imagined to be consistent with certain personality types. Our coverage in this area is far from complete and is meant only to suggest, and briefly illustrate, this line of reasoning.

Roe (1952) conducted a study of eminent scientists and found consistent relationships between personality pattern and occupational self-selection. Scientists generally came from home backgrounds which

emphasized the importance of learning for its own sake, and which tended to place the children on their own resources. There was therefore a personality pattern organized around the major themes of objectivity and independence. Among scientists, Roe reported that biologists had an orientation which strongly emphasized reliance on external controls; physicists were often anxious and both disinterested and unskilled in interpersonal relations. She reported, as well, that social scientists manifested deep concern about human relations, and were troubled by them. One of the difficulties with this type of argument is that the descriptions of personality types tend to be so broad and general that it is difficult to assess whether the reported patterns were causative of occupational selection or the results of successful socialization into the occupation. In this regard, one recalls that Rosenberg (1957) found that once university students had chosen their occupational fields they began to manifest the appropriate values through anticipatory socialization.

Etzioni (1961, p.295) suggests that just as organizations vary in their compliance structures - some being based on moral involvement, some on calculative involvement, and others on coercion - so too do individuals vary in their personality predispositions to these compliance structures. Self-selection, augmented by techniques of organizational screening, produces an imperfect, yet effective, fit between the compliance structure in the position and the organization, and the personality patterns of the incumbents. Unfortunately, Etzioni offers no data to substantiate this

claim, but he offers the hypothesis that among executives successful "mobility from company to company, from job to job, depends upon staying with the same compliance specialty rather than work with the same type of manufacturing techniques" (p.296). Implicit in this line of reasoning is the assumption that the personality organization around compliance tends to be so stable that facile adaptation to a new structure is not to be expected. The empirical evidence provided by Dalton (1959), Becker et al. (1961), and Strauss et al. (1964) would appear to belie this assumption, since all these case studies point to a wide range of adaptive behaviour, whatever the personality type.

Intrapersonal Organization

Roethlisberger and Dickson (1939) made much of this factor as a determinant of work-related behaviour and of reactions to various aspects of the work organizations. Their study is replete with reports of the worker whose unhappiness was caused by such factors as having been reminded of an authoritarian father by one's immediate supervisor, or conflict and tension at home, etc. The Mayo school has tended to pay a great deal of attention to this level of analysis, and the notion of anomie was introduced into the work setting. Whyte's "crying waitress" is an example of the employee's inability to accommodate herself to the strains inherent in her work, the tension level being so high that she has no recourse but temporary withdrawal and a convulsion of tears (1948).

Hart (1949, pp.55-56, 72) offers a critique of this approach, attacking it not so much because it is thought to be untrue, but rather because it deflects attention from the other variables of presumed greater importance. Hart suggests that the approach is too interlarded with individual analysis to pay adequate attention to social disorganization and reorganization. Furthermore, it tends to reserve all solutions for managerial action, ignoring the socially supportive functions of individual adaptation, informal work groups, and labour unions. Finally, the focus on individual psychology and on anecdotal life histories deflects one's concern with the social nature of the work place.

Personality as a Perceptual and Cognitive Screen

While it is generally acknowledged that man's perceptions, evaluations, and cognition are filtered through the screen of personality, not many students of work and work behaviour make important use of this conceptualization in their work. Herbert Simon tends to be a major exception, placing almost all of his work within this framework. Simon tends to adopt a Skinnerian view of psychology, and keeps manifest how the individual personality deals with the perceived alternatives presented to him by any work-evoked stimulus. This view, when added to the organizationally provided need for rationality, tends to lead Simon to some rather naive conclusions. For example, he states that:

> Two persons, given the same skills, the same objectives, the same knowledge and information

> can rationally decide only upon the same course of action. Hence administrative theory must be interested in the factors that will determine with which skills, values, and knowledge the organization member undertakes his work (1952,p.54).

Even if one grants Simon his initial assumption that identical skills, objectives, knowledge and information, when added to an identical view of rationality, will produce identical decisions - itself an undemonstrated assertion - the naivety implicit in the expectation that these data are readily available to the organization is astounding.

In a later work (March and Simon, 1958,p.53,93-95) some greater specification of how personality functions as a screen is provided. For example, the worker's motivation to produce is seen as a function of the characteristics of the evoked set of alternatives, their perceived consequences and the individual's goals (p.53). Similarly, an individual worker's propensity to leave his employment is seen as a function of the state of balance between inducement utilities (rewards) and contribution utilities (costs) which balance is itself a function of, among other factors, the perceived desirability of leaving, and the perceived ease of movement (p.93). While this level of argument is plausible and difficult to dispute, it is equally difficult to empirically demonstrate, and in this regard it must be noted that Simon's major contribution has been theoretical, not empirical.

With this brief foray into the literature on personality variables as determinants of work-related behaviour, we now move into the next major subcategory of intrapersonal factors.

LIFE HISTORY

Full attention to this topic would result in a lengthy and excessively documented separate report. We therefore accept as having been adequately demonstrated the proposition that ascriptive factors in one's life history - age, sex, ethnicity, race, religion, affiliations, etc. - operate as determinants of aspiration levels, acceptability into certain occupational levels, and career mobility. Illustrative examples may be found in Hughes and Hughes (1952), Dalton (1959), Hall (1948), Smigel (1964) and myriad others.

Our concentration will be on the importance of the first job as a determinant of subsequent work life. Slocum reports the following studies (1966, pp.176-183).

In a study of the labour force of Oakland, California, Lipset and Bendix (1959) found a considerable amount of occupational mobility. While most job changes were found to be among jobs at the same status level, there were many shifts, mostly temporary, across the blue/white collar line. The important finding was that the first job tended to be a good predictor of future occupational mobility. Family socio-economic background, if low, tended to depress mobility, and to support it if high.

A Detroit study by Wilensky (1963) found that the level of the first job was highly associated with the orderliness or disorderliness of the work history. Most of his sample of lower-middle and working class men had disorderly work histories, but to the extent that orderly work careers were found, they were related to a start in the higher occupational strata. Miller and Form (1951) also report that job instability was most frequently found among unskilled workers, semi-skilled factory operatives, and those in domestic and personal service work. Like the Lipset and Bendix finding, workers were found to generally stay at the same occupational level as the first job entered.

In a study of occupational changes among professionals, Reiss (1955) found that those in the established professions tended to change the least, with more change reported for those in the semi-professions and "would-be" professions manifested the greatest amount of occupational change.

The conclusions we may draw are as follows: Of the very great number of job changes that occur at any point of time, most represent lateral movement in status. Mobility, where it does occur, tends to be most highly associated with the possession of positively valued ascriptive characteristics, higher amounts of education, and commencement of one's work life at a higher, rather than a lower, status level. As Becker and Strauss suggest, one's education and last work experience tend to become

regarded by prospective employers as ascriptive characteristics and appear to determine whether the attained jobs will represent short or long career escalators (1956).

ROLE ORIENTATIONS

In what respects are the orientations toward particular work roles determinate of the ways in which one's work life enfolds and of reactions to work? We shall, in this section, cite several of the studies which attempt to provide answers to this question.

The first distinction of any importance may be whether one is oriented to work as merely a set of activities by which subsistence needs are met, or as a career. Dubin (1958, p.276) defines a career as a succession of related jobs, held in ordered series, with some kind of relationship between them. This is the commonly accepted view of the career, the essential elements of which appear to be sequential continuity and organic unity between the jobs held in one's lifetime. Some (for example, Slocum, 1966) treat the career as having an upward mobility referent so that the ordered sequence implies better positions following poorer ones. Hughes and his students have, on the other hand, tended to avoid a necessary attachment to the notion of upward mobility. The characteristically Hughesian example offered is the career of the prostitute whose best prospects are present at the beginning of the career before health and beauty dissipate. Dubin suggests that when one is oriented to view work life as organized around a career, the

individual has expectations of the future, a lengthy time perspective, and a degree of predictability of one's future employment. And he adds that the more one's work life actually approximates a career, the more predictability of the future is ensured (1958, p.279).

Rosenberg (1957) concluded that members of his nationwide sample of college students were oriented toward work as a career, and not to work as mere subsistence-providing. This is consistent with the generally held finding that the higher the level of education, the more one's work life approximates a career. Rosenberg reports that an orientation to work as a career carries with it concomitant orientations to work as having to provide self-fulfillment, interpersonal satisfaction and security. Rosenberg feels that his most significant finding is the relationship found to exist between the student's value orientations and his occupational choice. Generally, students with an orientation toward helping people chose the liberal professions, students oriented toward extrinsic reward sought careers in financial-commercial fields, and those oriented toward self-expression those occupations in the creative field.

Gross (in Faris, 1964, pp.669-670) reviews the literature on employed professionals. He examines the traditional view that professional and bureaucratic orientations are thought to be antithetical and concludes that they have points in common as well as in opposition. Both professional and bureaucratic orientations to work are characterized by universalistic

standards, specificity of function, affective neutrality, and performance criteria for evaluation of competence. They differ in the respect that while the bureaucratic orientation is thought to be devoted to an increase in the self interest of the employing organization, the professional orientation is toward the needs of the client. The second point of difference is that the bureaucratic orientation is toward hierarchically organized authority and decision-making whereas the professional is oriented toward colleagial authority and equalitarian decision-making. However, there are several challenges to these points. Hughes (1960) pointed out that it is often the employing organization that is transformed, that it may accommodate to professional norms rather than forcing the professional to accommodate. This is most obviously the case for those professionals possessing highly marketable skills in a situation of short supply. Etzioni (1961) has raised questions about the supposed colleagial nature of professional authority relations, suggesting that while technically professionals are peers, the effective authority structure is also hierarchically organized. Notwithstanding these cautions to viewing the professional as antithetically oriented to the bureaucracy, it is still a fact that increasing numbers of professionals are accepting employment in large organizations, and that many of the imagined strains and tensions are handled at the contractual level.

Research by Reissman, who studies professionals employed by the U.S. civil service, suggests that it is an error to regard either professional or bureaucratic orientations as unitary. He finds that there are four main types

of role conceptions in his sample, representing various admixtures of each orientation. The functional bureaucrat is the most professionalized, who may be portrayed as a professional who "just happens to be working for the government". His reference group is not within the bureaucracy but his colleagues outside. His associations at work are distant and formal. He accepts bureaucratic rules as the limits within which he feels free to operate professionally. He feels no conflict between his professional ethics and his job because only the former exist for him. The specialist bureaucrat resembles the functional bureaucrat in professional orientation but is far more aware and mindful of the bureaucracy. To the degree that he seeks departmental recognition and the approval of those he works for, he identifies more with the bureaucracy than with the profession. His orientation is one of ambivalence, feeling a kinship with other professionals in his field, and yet feeling unlike them by the virtue of his organizational attachment. He would like professional recognition but works for organizational rewards instead. The service bureaucrat is also somewhat ambivalent in his role orientation. He is oriented in terms of the bureaucratic structure but seeks recognition from the client group outside of it. He entered the civil service primarily to realize personally-held goals centred about the rendering of service to a certain group, and he uses the bureaucracy as the facilitating framework through which he can achieve his goals. Finally, the job bureaucrat is immersed entirely within the bureaucratic structure. Professional skill provided the necessary entrance qualifications and determines the nature of

the work to be done. Recognition is sought solely from the organization, not from the profession. The sought rewards are those provided by the organization, and the organizational goals are accepted as legitimate avenues to their attainment. His orientation is to the work rules and the ends to be served (1949, pp.208-210).

Wilensky's description of the role orientations of experts employed by labour unions is analogous (1956). The underlying value orientation of the expert predisposes him to hold a particular orientation to his job. Those who are oriented primarily to uplift and social reconstruction are the Missionaries, those oriented to their professional skills are the Professional Service Experts, those oriented to self-advancement above all else are Careerists, and those who are oriented to union politics as intrinsically satisfying irrespective of program content are the Politicos. Each of these major orientations may be more finely subdivided, and Wilensky identifies eight types of role orientations (pp.112-113). Having made this distinction, Wilensky suggests that to the extent to which one's internalized group standards conflict with those of the organization, the expert will be susceptible to felt role conflict (pp.112-113). The Professional Service Experts are most susceptible to this strain in missionary or dishonest unions; the Missionaries are most subject to role conflict in bureaucratized unions (pp.129-134). Wilensky finds that the stability of the original role orientation varies inversely with the amount of role conflict experienced. The

most stable types were those with a means-centred outlook since this was the most prevalent characteristic of the unions studied. When a shift in role orientation occurs, it is always in the direction of means-centred outlooks (pp.172-174). Finally, the Politicos and one type of Missionary tended to be the most influential experts since the former are objectively useful and the latter represent the idealized sentiments and attachments of the leaders. The Legislative-Liberal Missionary's influence is also a function of the as yet still low degree of bureaucratization in most unions (pp.196-208).

Finally, Strauss and Rainwater (1962, pp.167-168) report that chemists who are oriented toward basic research tend to self-select themselves into appropriate work settings as do those who are oriented to applied research. But since the self-selection does not operate perfectly, there are variations in attitudes toward experienced autonomy that are highly associated with variations in role orientation. The least resentful about the degree of autonomy granted them by research administrators are bench chemists, research administrators, chemical engineers, and non-research administrators while the most resentful are the Ph.D's and those non-Ph.D's who do basic research.

ASPIRATIONS

We cite several studies which use personal aspirations as explanatory variables in accounting for worker behaviour and attitudes.

Chinoy (1955), in a now classical study of American automobile workers, finds that they either have low levels of aspiration, or that if they do aspire to upward mobility and success, they have poor opportunities to realize them in the automobile plant or in some small-scale entrepreneurial activity. The low aspirations, where they are found to be present, result from what Chinoy calls the "immediate gratification syndrome" the unwillingness to forego advantages in the present while preparing (for example, through education) for mobility opportunities. The unmet aspirations, on the other hand, cause the workers to deflect the arena of hoped-for success from the occupational to the consumption and security spheres. Once they become aware that they will not progress occupationally they aspire to the physical manifestations of a high standard of living and to an economically secure retirement.

Wilensky and Edwards (1959) consider the "skidder", the person who is downwardly mobile in his occupational life. They discover, to their admitted surprise, that most skidders, particularly the older workers who have moved downward in their own life-times, maintain continued mobility aspirations and deny failure. The Wilensky and Edwards' explanation is that mobility aspirations were so firmly implanted through early socialization that they cannot be given up even in the face of externally objective evidence of non-success.

Carlin (1962, p. 200) accounts for the low satisfaction levels of independent lawyers by the lack of fit between their aspiration levels and the objectively low status of their practice. Despite attempts to rationalize the situation, they admit to low satisfaction. Contingent variables in determining the level of dissatisfaction were the level of the practice, the field of specialization and the level of income. By level and specialization, the most dissatisfied were the low level real estate and business-corporate practitioners. For lawyers specialized in personal injury and general practice, there was only a 3% difference favouring lower level in the reported dissatisfaction. The data also indicated a direct relationship between income and satisfaction. Carlin holds, however, that these differences represent relative differences among a group who are generally absolutely dissatisfied with their low status vis-a-vis their high aspirations.

Slocum (1966, pp. 194-195) hypothesizes that it is in the nature of the pyramidal structure of most business hierarchies that high occupational aspirations cannot long be realistically sustained. Since only relatively few can be promoted, and those tending to be those who have always been successful, the others tend to revise their expectations downward.

Dunkelberger found in a study of male household heads in low income areas of the rural South that high aspirations were not necessarily matched by high expectations. The men in his sample tended to have high

aspirations but low expectations, and they, like many of the automobile workers studied by Chinoy (1955), shifted their aspirations to the occupational mobility of their children. Nearly all these fathers aspired to high status-level occupations for their sons (cited in Slocum, 1966, p.195).

Slocum also reports that Presthus offers a classification by career aspirations (The Organizational Society, 1965). The upward mobiles have high aspirations. The indifferents have given up hope of advancement and now settle for security and extra-vocational satisfactions (compare Chinoy, 1955). The ambivalents are intellectually able but interpersonally poor, often critical of the employing organization but still wanting recognition from it. Slocum reports that no supporting data was offered (1966, p.196).

LEVEL OF COMMITMENT

We may approximately define commitment as the extent to which one invests oneself in a given occupational title, task, or organizational involvement. High commitment would be characterized by a firm value choice plus a disinclination to change it for other available alternatives. Thus conceived, commitment may be thought of as determinate of occupational choice, propensity to be loyal to a given employing organization, extent to which occupational effort is expended, propensity to change one's occupation, etc. We will cite several studies which either implicitly or explicitly make use of the concept.

Slocum (1966, p.190) cites a nationwide study of 40,000 American high school students conducted by Flanagan (1964) in which it is revealed that 75% of the high school juniors who had two years previously indicated an occupational objective had subsequently changed their choice. Slocum's conclusion is that occupational plans by adolescents may be safely regarded only as indications of interest rather than as declarations of intent. That is, lacking anchorage in an occupational commitment, the early choices were subject to radical change.

Slocum (1966, pp.208-209) goes on to criticize the theory of a rationally-based choice process suggested by Eli Ginzberg and his associates. Ginzberg's theory describes the hypothesized development phases through which occupational commitment is built, taking account of such factors as interests, capacities, aptitudes and a growing objective awareness of the external occupational opportunity structures. Slocum, on the other hand, believes that most choices are either non-rational, or lie closer to the non-rational than to the rational end of the continuum, the problem being that it is rarely the case that sufficient self-knowledge, knowledge of the work world, and commitment coalesce into a rational decision. This conclusion is based on research (not cited) conducted with high school and college students, and tends to be consistent with the material on adult work histories which stresses their random and undirected nature. Notwithstanding the non-rational and largely uncommitted nature of occupational choice for the

majority of workers, Slocum reports, citing Herzberg (1957), that adult workers tend to become emotionally involved in whatever occupation they happen to be working at. The data reveal that high proportions of workers prefer their current occupations and neither aspire nor expect to rise to a higher-level occupation.

Gusfield (1961) in a study of work histories found several distinctive patterns. One pattern, the undirected, was characterized by frequent job changes and occupational impermanence. The unestablished pattern showed no record of stability whatever, for example the casual labourer. The disestablished pattern included those who once had a stable occupation, and left it. Gusfield found two patterns by which stable careers were established. The immediate establishment pattern was characterized by early commitment and no later changes. The gradual development pattern was characterized by experimentation and shifting about early in the work life, but no changes after an occupational commitment was finally made (reported in Slocum, 1966, pp.176-180).

Strauss and Rainwater (1962, pp.59-60) report on the modal pattern for the choice of chemistry as an occupation. One gets a strong sense of drift from their description of the process. The choice is made almost by default. In the absence of other strong vocational interests, doing well in the subject, liking one's chemistry teachers, and parental acquiescence seems to draw the person along into the occupation. The commitment to the occupation tends to be the result of the process rather than a force directing it.

Stinchecombe (1959, pp.68-69) and Barber (1963, p.672) characterize craft and professional occupations respectively as enjoying a high degree of commitment from their incumbents. In some measure, it is the extent of commitment that is responsible for the internalization of work standards, values, and procedures, which in turn is rewarded by a "professional" work status.

In his typology of organizations as coercive, utilitarian, or normative, Etzioni (1961) suggests that it is in the normative organization that the participant is most likely to make a moral commitment. In his scheme, most work organizations would be characterized by a calculative type of involvement on the part of the lower-level workers. Even in normative organizations, charismatic leaders are required for those positions in which decisions about ends are made or from which expressive performances are controlled, since charisma heightens the extent of the moral commitment (p.211). Later, Etzioni suggests that positions of this type in utilitarian organizations - that is, most work organizations - also require charismatic leadership to maintain some degree of moral compliance from the subordinates.

Finally, Gouldner (1957, 1958) uses the direction of commitment to differentiate "locals" from "cosmopolitans". Locals are those who are strongly committed to the employing organization at the expense of lower level commitments to their specialized role skills and professional reference groups. Cosmopolitans, on the other hand, have lower level commitments to

the employing organization, high commitments to their specialized role skills and their professional reference groups. Generally, the locals tend to be committed to loyalty while the cosmopolitans are committed to expertise. In this connection, Bennis et al. (1958) in a study of nurses, modifies the Gouldner proposition as follows. Commitment to professional skill produces low commitment to the employing organization only if the employing organization offers comparatively more limited professional opportunities than others (cited in Gross, 1965,p.105).

CONGRUENCE OF EXPECTATIONS AND REALITY

Logic suggests that it is easier to accomodate oneself to an objective situation which is congruent with one's expectations than to one which is not. The degree to which expectations are matched by reality should, therefore, be somewhat determinate of how reality is dealt with perceptually, cognitively, attitudinally and behaviourally. We shall examine some of the literature which addresses itself to this point.

While most of our reports deal with individual responses, we may begin with Etzioni (1961,p.146) who discusses an organizational outcome. Simply put, "the amount of socialization required by organization depends ... on the degree to which organizational behaviour differs from the behaviour the participants have learned elsewhere". Wheeler (Brim and Wheeler, 1966) makes the identical point in his consideration of organizations specialized in adult socialization. The essential feature of the argument

hinges on the lack of congruence between the organizationally - required behaviour and the expectations of the participants.

A variety of individual outcomes are described in these circumstances. Becker and Geer (1958) study the fate of idealism among medical students for whom organizationally required cynical responses are out of line with their originally idealistic expectations. Surprisingly the lack of congruence leads not to a radical revision of idealistic expectations but simply to their postponement. Getzels and Guba (1955), in a study of elementary and high school teachers in both rural and urban settings, found a strong relationship between the extent to which the school and its environing community met teacher expectations for their occupational role and felt role conflict. Teachers whose personal characteristics (age, sex, and marital status) made it most likely that they were career teachers were most liable to role conflict when their expectations and reality were incongruent. Wilensky (1956, pp.196-208) relates the congruence between the expectations of labour union experts with varied role orientations and the needs of the unions, to the objective chances of career success for the experts. Dalton (1959, pp.161-164) finds that nearly identical situational responses are required for success by the well-rounded university student and the mobile manager, and that university attendance is therefore productive of a set of expectations and skills which are congruent with the organizational reality.

Finally, the process of self-selection is often used to ensure congruence between expectations and reality. Strauss and Rainwater (1962, pp.167-168) find that it is the chemists who are most ready to accommodate to profit-making or practical criteria that most usually accept industrial or governmental employment, and those who are least able to accept these criteria that work in universities and basic research settings. Etzioni (1961, pp.212,213) suggests that self-selection ensures congruence for specialists and segmentalists who choose instrumentally-oriented and/or means-centred jobs, and for generalists who choose expressively-oriented and/or ends-centred positions.

In summary, congruence of expectations and organizational reality is thought to be determinate of reduced needs for organizational socialization, higher levels of ability to do the given work, and less felt role conflict. In training situations, the lack of congruence need not permanently alter the original expectations. Self-selection (and, of course, organizational recruitment) heighten the possibility that there will be congruence.

ADAPTATION TO THE WORK SITUATION

Much of the material already reported could have been treated under this heading, and will not here be repeated. We shall, however, cite several additional works.

Merton (in Nosow and Form, 1962) in a theoretical essay discussed the consequence of complete adaptation to the bureaucratic work situation. In Merton's view, since the essence of bureaucracy is discipline, devotion to duty, bounded authority and competence, and routinization, strong sentiments grow up around the organizationally-designed means for achieving its goals. This has the effect of psychologically transforming the means by which goals are realized into ends in themselves. This then gives rise to rigidities in meeting unexpected contingencies or changed conditions and to a formalism and ritualism in the manner by which work is performed. If the bureaucrat is successfully socialized by the organization, he actually has a trained incapacity to give service.

Merton may be criticized for having looked primarily at the officially-sanctioned means of organizational goal accomplishment, but the empirical case studies of bureaucracy have produced so mixed a set of findings that both Merton and his critics receive some empirical support. The available evidence on adaptation suggests, however, that bureaucratic success is more closely associated with innovative than with ritualistic or conformist behaviour. In a subsequent article, Merton himself describes a variety of adaptations to bureaucracy, varied on the axes of the acceptance of organizational goals and the efficiency of organizational means (1957).

Breed (1956), in a study of newspapermen, attempts to explain why they so readily adapt to publishers' editorial policies which are so

uncongenial to their own. His data indicate that adaptation to an unshared point of view does not induce a change in the newspaperman's ideological stance. The adaptation is brought about by a set of procedures which subtly redefine policy issues into questions of newsworthiness, by the esteem reporters have for their superiors, by their mobility aspirations and the desire to please their superiors, and by the compensating symbolic rewards which newspapermen enjoy. The adaptation, though effective, appears nonetheless to be only skin-deep.

Fred Goldner (1965) discusses the rather widespread contingency of demotion in large bureaucratic settings. The workers who anticipate such a possibility - and from 59 to 64 per cent of the sample did - often protect themselves from undue stress by making a prior adaptation. Rather than await demotion with their mobility aspirations still in full sail, they begin to manifest defensive rationalizations about the disadvantages of high rank, to deflect their means of self-expression from work to family areas, and to develop alternative goal systems in consumption and leisure. Goldner points out, however, that too much success in prior adaptation may have some elements of the self-fulfilling prophecy, ensuring the outcome which the prior adaptation sought to accomodate.

CONCLUDING NOTE

It should be pointed out that the available literature is so extensive that, notwithstanding the length of this paper, more has been left out than included. Despite the many omissions in the theoretical and empirical literature, we are hopeful that the major themes have been identified, discussed, and evaluated. It is nonetheless important that the material can one day be integrated and synthesized into a set of multidimensional propositions which would lead us to the complex interplay of a variety of causal factors.

It is the current lack of such a synthesis - linking the separate contributions of each of the major causes of variation - which prompts us to recommend caution in accepting unidimensional approaches to such complex phenomena as work behaviour, work satisfaction, aspirations, attitudes toward work and so on. A true theory of work behaviour and work attitudes would have, of necessity, to deal with many variables and the interaction effects between them. Although this has not been the task of this literature review, it is our hope that the ground has been somewhat cleared through the identification of what seems to us to be five separate lines of reasoning in accounting for the same phenomena. Clearly, our division of the field is more suggestive than definitive, but a beginning has been made.

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