![Springer logo](horse head emblem) **Springer**

Production, Identity, and Democracy
Author(s): Peter Miller and Nikolas Rose
Source: *Theory and Society*, Vol. 24, No. 3 (Jun., 1995), pp. 427-467
Published by: Springer
Stable URL: http://www.jstor.org/stable/658075
Accessed: 09/10/2013 09:21

Production, identity, and democracy

PETER MILLER and NIKOLAS ROSE

London School of Economics and Political Science; Goldsmiths' College, University of London

Current debates in sociology about subjective identity in late- or post-modernity accord events in the sphere of production an ambiguous status. For some, economic transformations have been central to the claim that something fundamental has happened in our present: a shift from "fordism" to "post-fordism," from mass production to flexible specialization, and from mass consumption to individualized and diversified consumption regimes.[1] Yet changing forms of identity are generally marginal to such concerns, or at best regarded as effects, rather than phenomena that may have a constitutive role in these events. For others, pronouncements about transformations in personal identity that are held to accompany the shift to a new epoch have been paralleled by a surprising lack of detailed attention to the world of work itself.[2] Analysts of identity have tended to focus either on consumption (lifestyles, advertising, and shopping) or on the "intimate" sphere of home, relationships, sexuality, and family life. Arguments that contemporary "self-identity" is characterized by enhanced re-flexivity, autonomy, or uncertainty have failed to recognize that the workplace is a principal site for the formation of identity. Of course, there have been numerous sociological discussions of the effects of work on identity, and of attempts to reform and humanize work. But their perspective has largely been that of critique.[3] Repetitively, sociologists of industry have recounted the tale of work as the site of degradation of subjectivity, and have grounded their accounts of resistances at work and their analytics of critique upon values of personal identity, agency, and self-affirmation, which are seen as essential to the human subject.[4] For such critiques, the language of participation, enrichment, quality of working life, empowerment, and the like are little more than disingenuous devices for seeking to bind employees to managerial norms and ambitions, masking a fundamental contradiction between bosses and workers. According to this perspective, it is only

through a fundamental transformation of macro-social, economic, and political conditions of production that work can be truly liberated.[5]

We differ from such approaches in that we view the workplace as a preeminent site for contestations about the nature of human identity, and for attempts to shape and reshape the identity of individuals.[6] We argue that attempts over the course of the twentieth century to transform production relations, in particular those that have been animated by the imperatives of democracy, have depended on specific, and changing conceptions of the person.[7] These interventions upon work, in which concerns with the identity of the individual have provided ways of linking the sphere of production with the nature of democracy, form the focus of this article. We address the ways in which particular conceptions of human identity, subjectivity, and personhood have been intrinsic to attempts to govern the world of work in a manner deemed legitimate in democratic societies.[8]

Transformations in identity, we suggest, should not be studied at the level of culture, nor solely in terms of the history of ideas about the self. A genealogy of identity must address the practices that act upon human beings and human conduct in specific domains of existence, and the systems of thought that underpin these practices and are embodied within them. For at least the last century, ways of thinking about and acting on work have been fully engaged with the philosophical question of what kinds of persons human beings are. Work has been a key site for the formation of persons. Individuals have been encouraged to discover who they are not only in the domains of sexuality and the family, but on the shop floor, at the work bench, on the production line, in a manufacturing cell, and in other analagous domains. And these concerns with the identity of the person at work have intersected with a range of different ways of problematizing the nature of work, democratic ideals, and productivity. Attempts to reorganize economic activity at the concrete level of the engagement of individuals in the work process presuppose particular identities that are fabricated at the juncture between psychological know-how and political ideals.

It is not only in our own "humane" times that the subjectivity of the person at work has been discovered, nor is a concern with the damaging effects of work on the person of the worker the prerogative of radical critics of capitalism. The identity of the economic actor – as worker and as manager – has been the object of analysis and intervention for at least a century. Theorists of management and organiza-

tions, as well as a multitude of other commentators and self-proclaimed experts, have sought to understand persons at work better, in order to govern them more effectively. On the one hand, all sorts of problems of work – labor turnover, unrest, accidents, inefficiency, boredom, and much more – have been problematized in psychological terms, and attempts have been made to ameliorate these problems by acting upon the psychological dimensions of the workplace – at the level of the individual and the group. On the other hand, the organization of the workplace has been problematized in relation to a much wider set of socio-political concerns – democracy, managerial authority, the legitimacy of the large corporation, the rights of citizens, and so forth – and again reform of the workplace on the basis of a knowledge of the subjectivity of the worker has been advocated in answer to such criticisms. These events have been bound up with the emergence of a new breed of experts of subjectivity, whose territory is the workplace and whose power in shaping the nature and politics of work is significant. These transformations in the field of work have important implications for the emergence of new regimes of subjectivity and new ethics of personal existence.

It is from the perspective of "government" that the full significance of this intersection of production, identity, and democracy can be appreciated.[9] In the most general sense, by government here we mean strategies and techniques for acting, through indirect means, on the conduct of others in a range of different sites, and under the aegis of a range of different authorities. A concern with government directs our attention to the intrinsic links between strategies for the regulation of the population as a whole, and strategies for knowing and regulating the nature of human individuals in their depths and details.[10] In the context of this article, it points us to an investigation of the ways in which the personhood of the worker has been "problematized" at the intersection of economic matters (such as the productivity of the enterprise) and political matters (such as the democratic legitimacy of economic power). By "problematization" we mean the way in which experience comes to be organized so as to render something as a "problem" to be addressed and rectified: interpretive schemes for codifying experience, ways of evaluating it in relation to particular norms, and ways of linking it up to wider social and economic concerns and objectives. We suggest that programs and strategies for the reorganization of work have come to be posed in ways that incorporate wider concerns about productivity and democracy, and that these are related in turn to prevailing conceptions of the nature, rights, and obligations of persons.

430

We argue that the government of the personal and emotional economy of the enterprise has been intrinsically related to the elaboration of a range of positive knowledges of this space of work, an *expertise* of the personal dimension of work. To administer work, it has become necessary to know, to calculate, to deliberate, and to evaluate. This knowledge of the world of work has been more than a speculative matter, more than a question of the rhetorical structure of discourses on work and economic life. Knowledges of productive life have opened up a space within which calculation, judgment, and intervention can operate. Conceptions of the appropriate way to organize work have been linked to a multiplicity of bodies of knowledge, as well as to blunt demands to increase output, speed up or transform production flows, increase efficiency, reduce wastage, improve competitiveness, and much else besides. The production process has come to be understood as a complex and multivalent apparatus, integral to which is a particular identity for the worker. The success or failure of particular technical arrangements of production has come to be seen as dependent upon what the worker is, what makes workers work or not work, what leads them to be absent or to leave, what reduces or increases workers' involvement in their work, and so forth. Programs for the organization and reorganization of work have incorporated such conceptions of the worker within the design and management of the production process. Schemes of work reform have taken shape within a practico-theoretical field in which the subjectivity of the worker is accorded a central value in problematizing production and rendering it intelligible. The worker has come to be understood and targeted as an active participant in the activity of work, not merely as an instrument of production but as a person: a human being realizing his or her self through work, or as a democratic citizen with certain capacities and rights.

In this article, we exemplify these relations among production, identity, and democracy by way of three historical examples: firstly, we consider the distinct concerns of the mental hygiene and the human relations movements in the early decades of the twentieth century; secondly, we consider the quality of working-life movement, and allied dreams of humane work that flourished in the 1970s; thirdly, we address the image of the enterprising subject that infused debates concerning the nature of work in the 1980s. We argue that these diverse ways of representing and seeking to act upon the world of work demonstrate both the political and the ethical significance of these modes of governing work.

From the human factor at work to the humanization of work

Across the first half of the twentieth century, one can see the identity of the worker emerging as a problem for the government of the workplace, and a range of attempts to reconcile different understandings of what the worker was with views on what gave work its political legitimacy. A brief overview of some of these early, and much analyzed, interventions illustrates this.

Psychological interventions on the identity of the worker in the early decades of this century, in Europe, the United Kingdom, and the United States, tended to see the human being as a productive force that should be utilized efficiently in the light of a knowledge of its modes of activity, its capacities, and its aptitudes. Psychotechnics, as this way of thinking was termed, presupposed and acted upon workers as if they were persons of a certain sort. This took two basic forms, each of which sought to optimize the utility of the worker as a psycho-physiological entity. The first was a design of the work process – place, lighting, height of equipment, and the like, in order to maximize efficient working and minimize the likelihood of accident. The second was a judicious process of selection and allocation of workers to different tasks in terms of a matching of their capacities to the demands of the activity.

This psychotechnical project is often seen as the psychological concomitant of "Taylorist" programs to establish managerial control over the whole process of production through systematic knowledge. It is true that, in psychotechnics, an expertise of work became, for perhaps the first time, dependent upon an expertise of the worker. The worker, like all other factors of production, was to become the object of a scientific knowledge and subordinated to a logic of efficiency. But the quest for efficiency that underpinned both this project and the endeavors of F. W. Taylor was a common element in a range of political programs that sought to advance national efficiency through the application of science and rational technique. The perspective of efficiency was to be extended to the worker, who was to be accorded a new visibility in relation to norms of production, calibrated by tests and assessments in relation to such norms, and enmeshed within an array of calculative practices.

The corollary of this science of the worker was that management and other forms of expert administration of conduct were to be accorded a

new form of authority. No longer was managerial power merely the blind, arbitrary, or willful exercise of authority; it could be depicted as scientifically grounded and rationally, objectively judged. The workplace could be managed according to a body of expertise that sought to set itself above and beyond the fray of politics. The government of the workplace could be made consonant with the political values of a democratic society; a basis in knowledge of work and the worker would make the exercise of managerial authority over individuals legitimate.

Taylorism is no doubt the best known, and the most vilified, attempt to govern the workplace systematically. But it was also one strand in a wider array of programs in which the identity of the person was problematized in relation to political ideals, economic problems, and the powers and legitimacy of authority. On the one hand, the workplace was one of a number of sites – including schools, asylums, courtrooms, and military organizations – in which the person was to become a "calculable individual" whose individuality could be assessed, and who was to be classified and acted upon in the light of this assessment.[11] On the other hand, as Miller and O'Leary have argued, scientific management was more than a "technical" reorganization of the space of work undertaken in order to maximize profit and docility.[12] Taylorism did not only appeal to the interests of big business and its political advocates. It also elaborated a set of principles and practices for administering the large corporation that offered Progressives in the United States a way of resolving many of the issues that had troubled them about the large corporation. In particular, Taylor's inventions addressed their concern that the unchecked concentration of power in the hands of the executive heads of large corporations posed a danger to the public interest, bringing the prospect of class cleavage, encouraging dubious relations between economic and political powers, reducing the dynamic for change and innovation that was provided by smaller entrepreneurs, and tending to remove individual accountability. By supplementing arbitrary authority with managerial expertise, Taylorism offered a "democratic" solution to such problems, since it made available to managers an image of how they could manage legitimately and a range of justifiable technologies for governing the enterprise, and thus avoided the need for the direct intervention of the state.[13]

Nonetheless, one can see a distinction in these programs for governing economic life between the government of the individual within work and the government of the individual outside work.[14] Within the workplace, the worker was "individualized" and subjected to a form of

government that sought to intensify labor in the service of enhanced productivity. Yet, in the early decades of this century, a "social" terrain was taking shape, in which the individual was located in a web of collective bonds of obligation, dependency, and solidarity: the struggles for the increase of workers' rights, for social security, social insurance, and state regulation of the contract of employment were fought in terms of such a social image of the worker. The economic and the social seem opposed, with struggles in the latter undertaken either in the name of the defense of workers against the tyranny of the economic, or in the name of the security of society against the frustrations that the economic can engender. And with this opposition goes a conflict, sometimes open and sometimes implicit, between two distinct models of the human being: as essentially distinct and individuated, with all the selfish interests that flow from this, or as essentially collective and social, and hence divided and damaged by current forms of industrial organization.

From the 1930s onwards, attempts to govern the identity of the worker in the workplace sought to transcend this opposition between the individualized identity of the worker at work and the socialized conception of the individual as citizen, without violating the private character of the workplace and the individual character of the employment contract. To do this, it was necessary to abandon the Taylorist attempt to link the design of work and the engineering of the capacities of the worker within a single program. The workplace became a social domain, but this was only to the extent that its sociality was understood as a field of psychological relations amongst individuals that affected all aspects of work, but were largely indifferent to the technical features of the production process.

This concern with the positive mental health of the worker was first worked out within the aegis of the mental hygiene movement. In Britain, in France, and in the United States polemical campaigns for mental hygiene connected industrial problems and the identity of the worker through the notion of "maladjustment." The worker, they argued, was a person with a psychology, with wants, needs, and instincts shaped in the family. The worker was an individual who sought gratification, in work as in the rest of life, of the instinctual wishes and desires that made up his or her character or temperament. For the mental hygienists, this meant that one should fit the person to the job, by careful assessment of character and intellect. One should also provide the correct mental atmosphere in the enterprise, through

434

leadership and management, an atmosphere conducive to the satis-
faction of the workers' instincts – which went far beyond the desire for
payment. Further, one should identify those individuals, whether
workers or managers, who were "maladjusted." For maladjustment,
largely caused by problems in child rearing, could lead not only to per-
sonal pathologies such as crime, delinquency, and even full-blown in-
sanity, but also was at the basis of countless industrial problems, in-
cluding petty jealousy, lack of co-operation, poor performance at work,
apparently physical illness and incapacity, frank neuroses, accidents,
and even labor agitation. In the United States, it was estimated that half
the annual cost of labor turnover was due to emotional maladjustment,
and that the effectiveness of half of the labor force was impaired by
emotional maladjustment.[15]

Mental hygienism helped bring about a transformation in ways of
governing the identity of the worker. The concern to identify, and then
to treat or exclude, the industrial misfit, and to understand the prob-
lems of the normal worker in relation to the atmosphere of the factory,
blurred the distinction between a psychology of adaptation and a psy-
chiatry of pathology: the mental health of the worker was to be a posi-
tive objective to be achieved by judicious management. Further,
through the grammar of mental hygiene, the government of the work-
place was again linked into a wider complex of programs of social
government of the family, the schoolroom, the delinquent, and the like.
Each had as its rationale the aspiration to transform these institutional
sites into machines for constructing social hygiene, by generalized
inspection, early intervention, and prompt treatment. Each factory
could become the locus of a technology that would promote general
and beneficial social effects by a preventative and prophylactic re-
formation operating on the identity of the individual and the relations
among individuals. Work was no longer accorded merely an economic
value; it was to be governed in the light of a knowledge and ethics of the
normal and pathological person, and it was to be regarded as a vital site
for production of the adjusted citizen.

By problematizing industrial efficiency in terms of the psychology of
the individual worker, the mental hygienists provided a novel program
for governing the enterprise. They also helped establish a division of
labor between those concerned with the "technical" matter of the
design of production arrangements and those concerned with the per-
sonal problems of the employee. This division was maintained in the
"human relations" movement now indelibly associated with the name of

Elton Mayo.[16] The interpretation that Mayo placed on the investiga-
tions of the Hawthorne Works of the Western Electric Company is too
well known to need rehearsing at length here. Nonetheless, its con-
tribution to the emergence of new modes of governing the workplace
are worth noting.

Human relations did not, as some imply, merely legitimate existing
powers in the workplace: it brought something new into existence. By
opening up to intervention the inter-subjective space of the factory, by
redefining the identity of the worker, human relations helped create a
mode of government of the workplace that could be deemed legitimate
in the changed political culture of the 1930s. The government of the
social relations between people as workers was one of a number of pro-
grams that sought to develop psychologically informed techniques for
acting upon the relations between human beings in the name of effi-
ciency, harmony, and contentment.[17] This was not simply a matter of
abstract theory, a question of conceptualizing the workplace as a
domain of human relations. The theory could itself be put to work,
built into various instruments for interfering in the lives and activities
of workers on the shop floor. The human relations of the workplace
were to be charted by means of new devices such as the attitude or
morale survey. Correlatively, they were to be managed through socio-
psychological techniques of leadership and communication. The plant
was now understood as pervaded by an attitudinal and communicative
atmosphere, a socio-psychological overlay to the actual organization of
the productive process itself. Nonetheless, for human relations inter-
ventions on work, the technical organization of work, by and large, was
not a matter for the social psychologist. There emerged a split between
what one might term the relational engineering of the workplace on the
one hand, and the psychological engineering of the production process
on the other: this latter would be psychologized in a distinct way – it
would become a matter for the physiological psychologist and the
ergonomist.

Human relations, as a program for governing the identity of the in-
dividual at work, established an exemplary linkage between the govern-
ment of production and the government of the social field. Mayo was
atypical in his use of a Durkheimian vocabulary to characterize the
relations between the socializing effect of the factory on individuals
and the threats of social disintegration and anomie. But the theme
that work is important as much for its moral effect on the worker as for
its economic effect runs through discourses on employment and un-

employment to the present day.[18] Production is problematized at the junction of a concern with the regulation of "the social" and a concern with the government of "the self." On the one hand, work is connected to the territory upon which all manner of "social" troubles are located and managed – crime, delinquency, indigence, drunkenness, prostitution, and the like – construed as threats to good order and social tranquillity. And, on the other hand, work is given a crucial role in the formation and maintenance of the forms of responsible selfhood upon which a free society is held to depend – regularity of habits, cleanliness, punctuality, diligence, persistence, responsibility to kin, and the like. No doubt this dual linkage may be traced back to discourses on work since the eighteenth century.[19] But, from the 1930s onwards, these themes became the object of a welter of empirical investigations conducted by sociologists, psychologists, and psychiatrists that scrutinized the forms of life and personal feelings of the unemployed, charted their patterns of demoralization and de-socialization, and invented devices to ameliorate them – especially in the young where their effects could be permanent – by instruction centers, job clubs, training and re-training schemes, and the like.[20]

Human relations exemplified a new alliance between political thought and the government of the workplace, a new conjunction between attempts to transform production relations and attempts to create particular democratic forms that depended on a specific identity for the person. From Roosevelt to Berle and Means, critics of the corporation in the United States of the 1930s argued that the concentration of resources within a few giant corporations had delivered the control of industrial life into the hands of a few unaccountable corporations.[21] Yet, on the one hand, they had not delivered a system of production and distribution that would ensure national prosperity – as the Depression indicated so clearly. And, on the other hand, the growing autocracy of economic life was not compatible with the values of democracy. The large corporation was rendered deeply problematic, as were the forms of authority exercised within it. The writings of Mayo, together with those of others such as Barnard, helped transform the meanings of managerial authority and the modern corporation. The modern corporation could be reconciled with democratic ideals through the recognition that the individual was the fundamental unit on which all legitimate cooperative organization must be founded. The contractual principle linking citizens together in the polity was thus to be taken as the model for the bond between the individual and the enterprise. Through respect for the values of the individual, the cor-

poration, together with the managerial authority it necessitated, could be represented as the perfect embodiment of democratic ideals.

In the post-war period, the political problematization of work and the workplace, and the concern with the identity of the worker, took a rather different form, one that was, nonetheless, amenable to the application of human relations expertise. The British case exemplifies this well. On the one hand, politicians and others were concerned about the proper role of the worker as a citizen of a democracy who had gone to war to defend democratic values. On the other hand, there was the increasing problematization of economic activity in terms of "productivity," coupled with the view, held by many, that war had demonstrated that central government could and should assume some responsibility for increasing industrial productivity.[22] In the United Kingdom, the war had seen the growth of procedures that sought to involve unions and management in joint consultation procedures at plant, regional, and national levels, quasi-corporatist arrangements forging direct alliances among government, employers, and unions in the national partnership for directing economic affairs. However, in the post-war period in the United Kingdom, each of the sides to such tripartite arrangements began to voice suspicion. Whilst in other European countries and Scandinavia, collaborative arrangements among government, employers, and trade unions at national and local level were to be developed, in the United Kingdom – as in the United States – such formal mechanisms of industrial democracy made little headway.[23]

British social psychologists of industry saw another way of linking democracy and productivity, which they believed was not just an alternative to formal mechanisms of representation, but a more adequate means of recognizing the democratic citizenship of the individual worker. J. A. C. Brown, G. R. Taylor, and many others began to argue that the organization of the workplace should also respect the need for partnership and should embody a recognition of the worker as a citizen of a democracy.[24] They elaborated an image of social dynamics based upon the American social psychology of Gordon Allport, Kurt Lewin, J. L. Moreno, Muzafer Sherif, and others, and the sociology of the Chicago School. Fusing this image of the dynamics of group relations with Mayoist human-relations arguments, they painted a picture of the worker as a human being, as one who searched for meaning in experience – and hence as someone who should be engaged in adequate structures of communication. Further, they argued, psychological ex-

438

perimentation had demonstrated that persons worked best when led democratically, not autocratically. They advocated a range of tactics for the government of the workplace that would, they argued, not only produce human contentment, but result in high productivity.[25] Such a rationale underpinned a series of academic texts and government reports in the United Kingdom in the early 1950s, which argued for increasing democracy at work in the name of enhancing both contentment and productivity. The management of the enterprise could, it was argued, be aligned with those images of enlightened government for which war had been fought, and that had underpinned victory, namely freedom, citizenship, and respect for the individual. Democracy was held to walk hand in hand with industrial productivity and human contentment.[26] An alignment was possible between a democratic identity for the individual as a citizen, and the role of the worker within industry.

As is well known, by the late 1950s these optimistic political aspirations for the democratic reform of work through the management of human relations fell into disrepute amongst both academics and politicians.[27] Evaluation studies suggested that any improvements wrought by human-relations innovations were short lived. Theorists and researchers on work drew attention to the technical features of industrial organization and accorded them a pre-eminence over and above human factors. Sociologists discovered that the worker had a life outside work, one that had more influence upon attitudes and values in the workplace than any rejigging of "atmosphere." The identity of the worker was now reconceptualized – the worker was a rational economic actor, not looking for pleasure or social values in work, but merely seeking to maximize the financial returns provided by employment in order to satisfy desires located in the world of leisure, family, and home. Radicals pointed to the inherent conflicts of interest between workers and management, that could not be conjured away by human relations manipulation, and drew attention to the anti-trades-union ambitions of "human relations" both in theory and in practice. Political problematizations of work, notably in the United Kingdom, came to focus upon the development of formal mechanisms to limit or rationalize conflicts between unions and management over pay, hours, and the like, conditions of work now figuring as merely one item amongst many over which bargaining between competing interests was to take place.

These changing presuppositions concerning the identity of the worker, and the correlative changing modes of governing the workplace across the first half of the twentieth century, illustrate a general feature of programs for the government of work: their congenitally failing nature – for the government of the workplace is made up of a multiplicity of heterogeneous and rivalrous schemes. The solutions put forward by one group are often viewed as problems by others. The aligning of problems and solutions is ever likely to be only a temporary stabilizing of relations between multiple agents and arguments. But failure is not destructive but productive, for the "failings" of one program are the impetus and the benchmarks for future programs. The ability of human relations to align the government of the workplace, the political problems of democracy, and the ethics of identity may have been a temporary and relatively short-lived phenomenon. But in the 1960s, a new identity for the worker, a new programmatic agenda, and a new way of intervening in the workplace was to be elaborated by experts of work, one that could be allied with a distinctive political rationality and a distinctive body of expertise. It is to this new agenda, one that had as its objective improving "the quality of working life," that we now turn.

The quality of working life

Work must be humanized; work can be humanized. Such was the message of an international conference held in Toronto in 1981. Some two thousand people from East and West Europe, Scandinavia, the United States, and Canada – managers, trade unionists, government officials, efficiency consultants, academics, and others – were gathered together to review prospects for work reform in the 1980s.[28] Those who attended were part of an international and self-consciously progressive politics of the workplace. The names given to these various projects for work reform were "arbetsmiljö," "humanisierung des Arbeitslebens," "amélioration des conditions de travail," "humanization of work," or, more generally, "improving the quality of working life." The local experiences they designated ranged from projects for industrial democracy in Norway to schemes of work redesign in the United States.

These varied formulations shared one central goal: to improve the "quality of working life." This ideal was articulated in the name of the mental health and personal fulfillment of the worker, the ability and morality of the manager, the quality of the product, the efficiency and

competitiveness of the enterprise, and the political legitimacy of the corporation. No longer, so they declared, was work to be a denial of the humanity of the worker. No longer was corporate power to exist as an anomalous domain of despotism in a political context imbued with the ethos of democracy. Through participative design, worker representation, flexible hours, job enrichment, job enlargement, self-managed work teams, continual retraining, and much else, work should, it was argued, become democratic, creative, innovative, and productive. At issue here was a new mode of governing work, one that would be compatible with a more expanded and optimistic conception of the democratic government of the nation. A particular conception of the identity of the worker as citizen was to be aligned with the reorganization of work on the shopfloor. A way of making this reorganization of work intelligible in psycho-social terms had to be provided if the aspirations to improve the quality of working life were to be provided with moral authority. The workplace had to be turned into a kind of laboratory, a site in which ideas, inscriptions, and instruments would seek to transform the world of work.[29]

The elements of this program had first been brought together in Norway in the mid-1960s. Norway's experiment with industrial democracy occurred at a time when Norway was concerned about its economic position vis-à-vis the Common Market, and when a United Nations study appeared to show that all their resources were being utilized fully – with the exception of their human resources. The Norwegian project took this definition of the problem and sought to address it by linking the problem of productivity to the question of democracy, under the name of "industrial democracy." Under the banner of democracy, alliances were formed among the Norwegian Government, the Norwegian Confederation of Trades Unions, and the Confederation of Employers, linked together via a program of research carried out jointly by the Norwegian Work Research Institute and the Tavistock Institute of Human Relations. And the "socio-technical" strategy for work reform that had been developed by the Tavistock Institute was able to reformulate itself as, above all, a program for real democracy.

The Norwegian project took as its starting point a decisive rejection of the notion that industrial problems may be overcome and productivity enhanced by public-opinion management in the enterprise, by improved communications, or, more generally, by acting managerially upon the atmosphere within which the social relations of production

are conducted. It commenced with a study that drew essentially nega-
tive conclusions from an examination of attempts not only in Norway,
but also in England, Poland, Yugoslavia, and East Germany, to install
democracy by the mechanism of worker representation on company
boards. It appeared that representative structures in and of themselves
would neither improve working life nor bring about a real democratiza-
tion of the workplace. Fundamental to the development of an alterna-
tive program of work reform was the argument that the technical condi-
tions of work themselves must be analyzed, calculated, and reorganized
in the name of a psychological conception of the identity of the worker
that would simultaneously answer to the values of industrial efficacy
and political morality.

The notion of "socio-technical systems," as formulated in the work of
the Tavistock Institute of Human Relations in the 1950s and 1960s,
underpinned this attempt to incorporate the technical dimensions of
work in a democratizing project guided by socio-psychological exper-
tise.[30] The intellectual and practical program of socio-technical systems
problematized the *technical organization* from the perspective of the
human relations of the work process. In the studies of the industrial
and productivity troubles engendered by the mechanization of coal
mining, the workers themselves in certain pits had managed to find a
congenial form of organization, in small groups whose members inter-
changed tasks and exercised a degree of internal control over their
work. An interesting phenomenon, no doubt, but hardly in itself par-
ticularly significant. However, when viewed through the perspective of
Bion's analyses of leaderless groups, the Tavistock's wartime discovery
of therapeutic communities, and Kurt Lewin's work on group dynam-
ics, this appeared not merely as a managerially useful solution to a
troubling set of difficulties, but a powerful and versatile new way in
which the "human machine" might be allied with the "productive
machine" by expertise. It was powerful and versatile because humaniz-
ing work was no longer merely a matter of adjusting the subjective
realm of work to its technical requirements by leadership and opinion
management. Rather, human requirements were to be internalized
within a technical re-configuration of the work process itself. The
worker was no longer to be understood merely as a psycho-physio-
logical apparatus, or a more or less adjusted psyche, or even as a crea-
ture seeking comfort, reassurance, and satisfaction through the soli-
darities of the workplace. The worker was to be given a new identity –
as an active and motivated individual, seeking autonomy, control,
variety, and a sense of worth, and finding this in the carrying out of

442

meaningful tasks within a dynamic system of small-group relations. And this new identity for the worker was to be embedded in a novel design of the physical and spatial aspects of the production process.

The socio-technical program invented a radically new mode of attention to the detailed organization of the plant – be it machine shop, calico mill, retail outlet, or coal mine – thereby providing managers with a new way of thinking about and acting upon their domain.[31] And it did this through a re-configuration of the physical and subjective organization of work at a level that made sense within the matrix of production – that of the group. Additionally, it provided a place for re-analyzing the pathologies of individuals – absenteeism, defensiveness, hostility to innovation and change, and the like – in terms not of intractable problems of the individual psyche, but in terms of the psychological consequences of particular group dynamics.[32] This promised a "joint optimization" of the social and the technical. And it did so through one particular socio-technical device – that of the "autonomous group," in which individuals in a group were given responsibility for a major section of a work task, setting their own targets and managing their own relationships with one another. By such means, or so it was hoped, motivation, satisfaction, efficiency, and productivity would be correlatively increased.

The socio-technical approach provided a profound "simplication" of the diverse troubles and activities that managers and others who were engaged in the detailed administration of the working environment had to cope with. Its "simplifying" capacity derived from the highly theoretical social-psychological vocabulary of social relationships that enabled it to make rationalized connections amongst a diversity of previously distinct and mundane matters of workplace organization – such as the numbers of looms for which each weaver, battery filler, and bobbin carrier ought to be responsible – and to articulate formulae for their reorganization.[33]

Further, in construing the enterprise as a unit of study, and in conferring upon this unity the dignity of the term "system," the socio-technical perspective not only made the managers' task more encompassing; it re-defined its boundaries so that the enterprise was not merely a unit of administrative convenience but became one of theoretical salience. And, in characterizing the enterprise as an "open system," it also provided a way of linking the organization of the shop floor to the "environment" within which it operated. The enterprise could now be

understood as a self-regulating system linked to an economy through "inputs" and "outputs." Thus did the notion of socio-technical systems link the internal configuration of the enterprise not only with market variations – scarcities, gluts, changing consumer demand – but also with variations in the "social" environment of work – political changes and changing ethical and cultural values.[34]

The Norwegian case provided the first locale where the elements could be brought together to set this program to work on a large scale: the democratic corporatist political rationality then prevalent provided the appropriate cultural ideals; the socio-technical expertise of the Tavistock Institute of Human Relations provided the requisite expertise; and a number of firms provided the vital laboratories. The research recommended nothing less than a fundamental redesign of work, a profound reorganization of the working environment along socio-technical lines. Drawing upon the experimental social psychology of Kurt Lewin, and Louis Davis's analysis of the practices of production engineers, experts sought to redesign jobs according to certain general principles: optimum variety of tasks; a meaningful pattern of tasks to give each job a semblance of a single overall task; an optimum length for the work cycle; some scope for setting standards of quantity and quality of production and a suitable feedback of knowledge of results; the inclusion in the job of some of the auxiliary and preparatory tasks; the tasks included in the job should include some degree of care, skill, knowledge, or effort worthy of respect in the community; and the job should make some perceivable contribution to the utility of the product for the consumer.[35] This redesign of work was more than a technical rearrangement of machines on the shop floor, it was to be the material basis for new relations among the demands of production, the personhood of the worker, and the political ideals of democracy.

In the period that followed, the Tavistock Institute of Human Relations played a key role in linking together the diverse initiatives that began to proliferate on the basis of the Norwegian examples, and stabilizing them into a functioning assemblage of thought and action. A network of researchers and action research centers began to form in Holland, Sweden, Denmark, France, and Ireland, as well as in the United States. By the early 1970s, the "movement" was receiving enthusiastic support not only from researchers, consultants, employers, and politicians, but also from such bodies as the International Labour Organization. The workers were enjoined to find dignity in work by identifying with the product, assuming responsibility for production, and finding their own

444

worth embedded, reflected, and enhanced in the quality of work as a product and an experience. The themes of job enrichment, job rotation, autonomous work groups, participation, self management, design of work systems, and so forth helped articulate a novel conception of the relations to be sought among the world of production, the identity of the worker, and the meaning of work in a democracy.

By 1972, when an International Conference was held in New York, this network had formed itself into a self-conscious international movement that went under the banner of the Quality of Working Life: the task of "humanizing work" was now a "priority goal" of the 1970s.[36] An International Council was established to integrate the national "nodes" of the movement into a supportive and expanding network that could put pressure on Government and establish the necessary expertise. With hindsight, the values it proclaimed do not, at first sight, seem all that novel: security, equity, individuation, and democracy. But the old language of human relations was inflected, even radicalized. There was an explicit concern with the deleterious social and political consequences of alienation at work brought about by the dehumanizing industrial culture, and anxiety about this spreading further to the personal services and even the professions. For some, the advance of technology was seen to herald the possibility of a destruction of jobs and the subordination of the worker to the machine. But for others there was also the rosy prospect of a fundamentally new identity for the worker in a post-industrial society, one that would be liberated from the constraint of repetitive and uncreative labor.

These twin options for imagining the future of work were in fact simply two versions of the same diagnosis. For they shared the humanistic aspiration to enhance the social solidarity provided through work. And both sought to align this with a new identity for the worker as a unique individual seeking a personal meaning and purpose in the activity of labor. If the autonomy of the worker was to be respected in a democracy, and if governments were to honor their responsibility for the welfare of each and all, this would need to be addressed not only by means of legal protection and social benefits, but would have to be pursued right down to the details of workplace and shopfloor organization. This would certainly enhance productivity, efficiency, flexibility, quality, and so forth, but, of equal importance, was that it would "optimize the worker's well-being and, correspondingly, that of society... [and] develop in the worker a sense of hope, activeness and productiveness, alleviating symptoms of discontent, mental illness and despair."[37] A

new responsible, autonomous, identity for the worker was to be the keystone in an arch spanning the protection of the social fabric and the revitalization of economic life at the one end and the reconstruction of the minutiae of technical, financial, and power relations in the work-place on the other.

The temporary potency of the movement for the quality of working life derived, in part, from its capacity to link together a wide variety of authorities on work into a loosely coupled alliance. This provided each with a shared rationality for their calculations and projects, and en-dowed their diverse ambitions, aspirations, and activities with a renewed ethical basis. Managers, supervisors, and trade unionists were concerned not merely with working conditions, but with the content of jobs, the organization of work, and the design of equipment. They were attracted by the possibility of redesigning production in such a way that would not diminish, and might even enhance efficiency, and yet would "take into account the rising proportion of employees who are seeking, in their work, a decrease in stress or boredom and an increased satisfaction of such natural needs as a continuing opportunity to make fuller use of their capacities – and to develop them."[38] Technologists and engineers concerned with automation found a language in which to promote their attempts to design new forms of production system, including the use of robots, that would modify and humanize tasks. Systems theorists found new conceptual and practical allies for their reconceptualization of organizations as "open" socio-technical systems of a dynamic character, in which the production system had to be designed with a recognition of its continuous transaction with a changing environment and the con-sequent need for flexibility. Accountants and economists discovered, in "quality of working life," a further argument to support the introduction of new techniques such as social audit methods and human-resource accounting, which would align their expert role with contemporary values.[39] Doctors and others concerned with the safety and health of the worker in the workplace, and the consequences of work for physical and mental health, found a new impetus for their somewhat unfashionable concerns. And social researchers, industrial consultants, and specialists in industrial relations found a new vocabulary for their activities and a new justification for their expertise that were simultaneously social, political, economic, and ethical.

Despite this ardent enthusiasm and advocacy, this experiment with improving the quality of working life was to prove local and short-lived. Whilst the five experimental sites in which Emery and Thorsrud's Nor-

446

wegian project had been installed achieved apparent success, the pro-
gram was not to diffuse across Norway as its originators had hoped.
Instead, the technology of work reform was to jump national bounda-
ries and to find, in the Swedish firms of Volvo and Saab Scania, its
paradigmatic locus. Sweden was at the forefront of the articulation of
democratic corporatism on a national scale, with representatives of
government, employers, and trade unions linked into an industrial
democracy joint council, experimenting with ways of reforming work
organizations, enhancing workers' power, promoting a new role for
unions, and establishing new methods of management in the interests
of democracy, efficiency, productivity, and equality.[40] The experiments
at Volvo's Kalmar car factory achieved a kind of mythical status. Intro-
duced in an attempt to cure a growing problem of absenteeism and
labor turnover, Volvo succeeded in cutting its absenteeism rate through
a comprehensive system of job redesign. This involved splitting the
assembly process into group working, allowing some rotation of jobs
within groups, and providing some freedom for groups to change the
layout of their working areas, to vary the pace of work, to alter the fre-
quency of rest-periods, to regulate the speed of assembly machines,
and the like.[41]

Whilst some other European and North American motor manufac-
turers showed interest in a more limited "humanization of work," the
general take up during the 1960s and 1970s was slow and unspectacu-
lar. In England, enthusiasm for this radical program for improving the
quality of working life by work redesign was largely confined to a few
researchers and evangelists; its destiny was to be reabsorbed into a
managerial technology for promoting worker commitment and con-
tentment. Elliot reports that research found only 111 examples of job
restructuring in Britain by 1975 – mainly having the form of job rota-
tion and job enrichment in firms with assembly line and process pro-
duction – a figure that had probably reached not much over 200 by the
end of the seventies. And the alternative path that was followed in the
United Kingdom for workers' representation on company boards, was
to prove a cul-de-sac.[42]

Work redesign, in the sense of the fundamental reconfiguration of
working arrangements on the shop floor, was thus intrinsically depend-
ent upon the salience of its particular conceptions of the identity of
the worker and upon more general political problematizations of the
place of work in a democratic society. The sense of its relevance to the
"problems" of production depended on a complex set of alliances

among political forces, employers, trades unionists, experts, and workers; in the absence of such an alliance, its capacity to produce effects was greatly reduced. Further, the very comprehensiveness of the vision of work reform articulated in the 1970s, the total transformation of the technical organization of the workplace it envisaged, set limits to its penetrative capacity. Nonetheless, whatever the limits of its practical impact, the program of humanizing work was to lose none of its seductiveness to work reformers in the next decade.

Dreams of humane work

Throughout the 1970s, the notion of the humanization of work imbued a stream of politico-ethical problematizations of production from the perspective of identity and democracy. A plethora of books, articles, conferences, and experiments at work reform took place in many different national contexts. In the United Kingdom, the Department of Employment published their report *On The Quality of Working Life* in 1973. The publication of the report was marked by the announcement by the Conservative Secretary of State for Employment of the setting up of a tripartite steering group – significantly organized around the less contentious theme of "job satisfaction."[43] The group, made up of representatives from the Government, the Confederation of British Industries, and the Trades Union Congress, was asked to "consider ideas for improving the satisfaction which people derive from their work," and to stimulate a wider understanding of what can, and should, be done to improve the quality of working life. Its chairman stressed that two factors were central to this new found national concern with job satisfaction:

> 1. The right of individual workers to be treated as human beings with feelings and personalities rather than as inanimate units of production.
>
> 2. The manifest pressures in advanced industrial societies that arise from basic incompatibilities between social and technological change.[44]

This set of linked themes – the rights of workers as citizens of a democracy and as human beings, and the need for industry to cope with technological advance and international competition – occurs again and again. The role of managers, in alliance with psycho-technical experts, is to be one of aligning the former with the latter, in a conceptual and practical matrix that simultaneously addresses questions of production, identity, and democracy.

Papers and monographs began to appear reporting experiments and case studies in the humanization of work, in ICI, in Shell, in Phillips UK, in BOC, and elsewhere.[45] The theory of job redesign and the reform of the world of production was elaborated in the professional and academic literature.[46] It provided a counterpoint to the rediscovery of a kind of sociologized Marxism, one that recast the theory of alienation in terms of the boredom and discontent resulting from the fragmentation and meaninglessness of working life under modern industrial conditions.[47] Thus Peter Warr's edited collection of papers from a conference held in York, England in 1974, and sponsored by the Scientific Affairs Division of NATO, published under the genial title of *Personal Goals and Work Design*, could open with a quotation from a distinctly ungenial work of Friedrich Engels entitled *The Conditions of the Working Class in England in 1844*: "Man knows no greater happiness than that which is derived from productive work voluntarily undertaken. On the other hand, man knows no more degrading or unbearable misery than forced labour... ."[48] The 87 participants in this conference came from 13 Countries: Australia, Belgium, Canada, Greece, the Netherlands, New Zealand, Norway, Swaziland, Sweden, Switzerland, United Kingdom, the United States, and West Germany. The range of questions covered is paradigmatic of the new matrix of theory, ethics, and practicability that work reform had constituted:

> What is the present level of work satisfaction? What is known about attitudes to work? What do people want from work? How are societies' views of working life changing? How adequate are our conceptual frameworks and methodological approaches? ... What organizational features are ethically desirable? To what extent should work be designed to promote psychological well-being? How do researcher's and consultants' value systems correspond to those of other people in organizations? ... How can we achieve what is desirable? What in practice can researchers and consultants do to change organizations? What factors prevent recommendations being followed? What organizational tactics yield substantial improvements?[49]

Albert Cherns synthesized the practico-ethical form of these contributions and their concerns to re-configure the social world by prefigurative changes within the workplace: "Changes in organizations aimed at replacing their constraining influence with liberating ones would do more than any other changes to engender imaginative and original solutions to our wider social dilemmas."[50] No less economically determinist in their way than Marx, the work re-designers saw their role as both idealists and realists, as a new form of pragmatic activism in the struggle to reform social life through a reform of the sphere of production.

The international cast of the work-reform movement indicates something significant about the potency of the alliance that it promised between expertise and ethics, between identity and productivity, between practicable local organizational change and governmental objectives for national economic health. Thus, only one year after it was established by Willy Brandt in 1971, the *Kommission für wirtschaftlichen und sozialen Wandel* (Commission for Economic and Social Change) had commissioned Lisl Klein of the Tavistock Institute of Human Relations to review theories and methods in the field of work organization and to report on European developments in the design of jobs and the organization of work.[51] The International Labour Organisation considered the development of new forms of work organization entirely in line with its interest, since its foundation in 1919, in making work more humane. It cooperated in a major study on the effects of group production methods on the humanization of work.[52] It published a series of articles on the organization of work in *The International Labour Review* from 1975 onward, produced a *Bibliography on major aspects of the humanisation of work and the quality of working life*, and included a systematic study of new forms of work organization in its program for 1976–1977, the first volume of studies on Denmark, Norway, Sweden, France, The Federal Republic of Germany, the United Kingdom, and the United States appearing in 1979.[53] Everywhere, it appeared industrialized countries were having to cope with the rapid pace of technical and social change; everywhere workers were becoming increasingly critical of conditions of work. New forms of work organization would provide some of the psychological incentives needed by all men and women as reasoning, social beings. And everywhere, such innovations would, it was argued, promote not only satisfaction, but performance, democracy, and adaptability to change.

The United States was a vital sector within the network for work reform. In the United States, the humanization of work was to emerge within a field of argument in which the traditional private corporation seemed to be proving itself inadequate to meet the imperatives of the new information technology, the pace of technological change, competition from the Third World and Japan, and the crucial importance of continual stimulation of consumption. These imperatives combined with a range of socio-political demands that production take as central the values of adaptability, innovation, flexibility, excellence, sensitivity to consumer pressures and the demands of the market. The work reformers argued that what was required was a mode of administering the

450

corporation so that it could adjust itself dynamically to the changing demands of this economic environment. And whilst there were innumerable recipes for the revitalization of economic activity, the programs of work reform could present their own schemes as being as well suited for the purpose as the old systems of organizational hierarchy were ill suited.[54]

Further, there were specific changes in the perception of the system of collective bargaining and industrial relations in America.[55] The American labor movement was widely thought to have reached a crisis after more than twenty years of decline – reducing in size and influence, unable to cope with new technological and social demands, outflanked by a range of popularly publicized agreements struck in non-unionized collective bargaining settings over issues that departed from the traditional agenda of improved wages, job security, and fringe benefits. The unions were faced with the question of whether they could find a role for themselves within this new environment of labor relations, one in which their membership now came predominantly from the public sector, whose workers were attached to the values of individual quality of life.

Additionally, demands and programs for the reform of work linked up with another set of concerns: political problematizations of the corporation that focused upon its lack of social responsibility, its democratic deficit. The repeated attempts in the United States to confer political legitimacy upon the corporation had not succeeded in reconciling the concentration of economic power in private hands with democratic ideals: As Kristol put it "No other institution in American history – not even slavery – has ever been so consistently unpopular as has the large corporation with the American public. It was controversial from the outset, and it has remained so today."[56] And Mintzberg argued that, if such significant sections of the population have come to feel swamped by corporate actions and corporate values – in their roles as workers, managers, consumers, citizens concerned about the natural and social environment, and the human costs of unplanned technology, the obvious question becomes "Who is wielding all of that power? Who controls the corporation, decides what it does,... *The giant corporation is typically controlled by its own administrators, despite the absence of a fundamentally legitimate basis for their power.*"[57] Of course, the responses to this democratic deficit were varied, but work reform could begin to stake out a powerful space within the field of programs for government regulation, worker representation, increased powers for consumers and lobbyists, and the like.

And the message of a range of studies and publications throughout the
1970s was also of a challenge from the workers themselves. From
Working, Studs Terkel's popular collection of interviews with people
talking about what they do all day and how they feel about it,[58] to *Work
in America*, a report by the government's task force, it seemed that:

> Our Nation is being challenged by a set of new issues having to do, in one
> way or another, with the quality of working life. This theme emerges from the
> alienation and disenchantment of blue-collar workers, from the demands of
> minorities for equitable participation in "the system," from the search by
> women for a new identity and the quest for the aged for a respected and use-
> ful social role, from the youth who seek a voice in their society, and from
> almost everyone who suffers from the frustration of life in a mass society.[59]

Work, and the reform of the workplace, could, it seemed, act as an
"institutional fulcrum to move aside many of the expressed dissatis-
factions of many Americans."[60] The work reformers accepted that
measures at the level of the work organization needed to be placed in
the context of programs of re-training, vocational guidance, and job
creation. Nonetheless, the redesign of jobs held the promise "to de-
crease mental and physical health costs, increase productivity, and
improve the quality of life for millions of Americans at all occupational
levels, it would give, for the first time, a voice to many workers in an
important decision-making process. Citizen participation in the arena
where the individual's voice directly affects his immediate environment
may do much to reduce political alienation in America."[61] The reform
of the world of production, that is to say, was to be an element in a
pedagogic program for the re-education of the disaffected in the values
of democracy.

In the space opened by the intersection of these diverse concerns, a
range of national organizations was established. There was the *National
Center for Productivity and Quality of Working Life*, established by ex-
ecutive order in 1970 and given statutory authority by Congress in
1971 – it explicitly linked the problem of improving the rate of pro-
ductivity with that of improving the quality of working life. There was
the *National Quality of Work Center*, founded in 1974 in affiliation with
the Institute of Social Research of the University of Michigan – it
helped set up and evaluate demonstration projects ranging from those
involving the Tennessee Valley Authority to those involving the United
Mine Workers of America and the Rushton Mining Company. There
was the *Center for the Quality of Working Life* formed in 1975 in affilia-
tion with the Institute of Industrial Relations of the University of Cali-

This content downloaded from 129.12.11.80 on Wed, 9 Oct 2013 09:21:19 AM
All use subject to JSTOR Terms and Conditions

fornia at Los Angeles – it sought to formulate and publicize approaches that would enhance the quality of life in the workplace. There was the *Work in America Institute* – it aimed to improve the nature and organization of work, and to increase productivity and enhance the quality of life. And there were innumerable similar bodies at the state and local level.[62]

As noted already, a conference held in Toronto in 1981 on prospects for work reform in the eighties attracted over two thousand participants, not merely academics but over a thousand managers, two hundred and fifty trade unionists, as well as government officials and efficiency consultants.[63] The doyens of the movement, such as Eric Trist, went so far as to propose a new philosophy of work and a new identity for the worker, in which people would be considered as a resource to be developed, not extensions of machines but complementary to them, not requiring external controls but regulating themselves, building the conditions for collaboration and collegiality rather than competition, for commitment and involvement rather than alienation, for innovation rather than the avoidance of risk, for fusing the purposes of the organization with those of its members and of society at large.[64] Trist was not alone in seeing, in the reform of work under the banner of the quality of working life, the first step in a process in which workers would increasingly come to recognize their own competence and would challenge not only the authority of managers but the very denials of rights fundamental to capitalist economic relations.

Despite its explicit emphasis on union participation and its espousal of emancipatory values, the same criticisms that had been levelled at human-relations doctrines were redirected at the Quality of Working Life.[65] No doubt they contain more than a germ of truth. But the significance of the notion of Quality of Working Life was not merely its capacity to disarm, disguise, and legitimate. These dreams of humane work were more than mere ideology, managerial apologetics, self-interested professional entrepreneurship, or palliatives for industrial discontent. They articulated a new image of work and a new way of making this image practicable, one that could be aligned with the aspirations and objectives of so many groups: not only workers, unions, managers, and bosses, but also politicians trying to program a reorganization of work to cope with the "turbulent environment" brought about by technological change, international competition, and the new aspirations of citizens. The apparent power of "quality of working life" lay in its capacity to establish a kind of mutual translatability of macro-

economic, industrial, social, political, and ethical concerns into prac-
ticable programs for the reform of the technical and organizational
dimensions of work in line with a new image of the identity of the citi-
zen in advanced liberal democracies.

But the technical forms of production organization that could make
such programs operable were only available in limited domains.
Attempts to realize the program in anything like its full form were
limited to a few hundred organizations in the United States, and even
fewer elsewhere. When this technical transformation was more widely
available – in the form of cellular manufacturing, Just-In-Time produc-
tion systems, zero inventory levels, computer-integrated manufactur-
ing, and so forth – it was linked up to a distinct set of ideals concerning
production and the identity of the worker, one that was apparently
better able to align ideals of individualism with those of group solidar-
ity. The central term of these new programs was *enterprise*.

The enterprising subject

During the 1980s, especially in Britain and the United States, a new set
of political ideals were to be articulated. The new right was certainly
most vocal in problematizing national life in terms of its neglect of the
values of autonomy, entrepreneurship, and individual self-motivation.
But these programs shared something with the otherwise very different
arguments of civil libertarians, traditional liberals, and left-wing radi-
cals: all were sceptical about the benefits conferred by systems of wel-
fare and about the powers that had been acquired by regulatory states
and corporatist relations amongst business, unions, and government,
and all based their criticisms on the wish to restore control to the citi-
zen as a free individual.[66] These political arguments took shape in a
context in which production in the formerly preeminent manufacturing
nations of the West was being problematized in a new way: in terms of
lack of international competitiveness, poor quality, and neglect of the
supreme importance of the customer. Such problematizations took one
country as their supreme point of reference: Japan. The threat of Japan
in the struggle for markets was linked to many things – price, quality,
innovation, and much more – but it was Japanese working practices
that were believed to be at the root of each of these. And one myth of
the Japanese worker – as valuing group harmony over individuality,
company loyalty over self-advancement, conformity over innovation –
was laid aside in favor of another. It was now argued that what made

454

Japanese companies successful, competitive, innovative, efficient, and market responsive, what gave them their deadly combination of high quality and high productivity, was the way in which they made use of the capacities and commitment of their employees.[67] Whatever the validity of these pictures of Japanese work practices, this new way of problematizing production in Europe and the United States tied programs of work reform to a new image of the worker that had been taking shape in industrial psychology and management theory during the 1980s: the worker was an individual seeking to fulfill him- or herself through work, and work was an essential element in the path to selffulfilment.

The notion that the manager should seek to instrumentalize the self-actualizing impulses of the worker was not invented in the 1980s – as early as 1964 Argyris was urging organizations to utilize positively the psychological energy of individuals, by allowing them to "strive continuously to find and create opportunities in which they can increase the awareness and acceptance of their selves and others."[68] But it was in the 1980s that an entrepreneurial identity for the individual became central to a new political problematization of work and simultaneously to a new set of ethical norms for the citizen in a democracy. The political vocabulary of enterprise, as it took shape in this period, established a versatile set of relations among a critique of contemporary institutional forms, a program for the revitalization of economic life and national power, and an ethics of the self.[69]

From the mid-1970s on, American theorists from Maslow to Herzberg, from Vroom to Peters and Waterman, painted a new picture of the worker as an entrepreneurial individual seeking to actualize and fulfill him- or herself in work as in all aspects of life.[70] Doctrines of management constructed within this problem space sought to overcome organizational problems, and to ensure dynamism, excellence, and innovation by activating and engaging the self-fulfilling aspirations of the individuals who make up the workforce. Work, they argued, must no longer be viewed as the imposition of constraint, order, and routine upon the individual whose individuality and personal goals were at best an obstacle to company objectives. The worker was depicted as an enterprizing individual in search of meaning, responsibility, and a sense of personal achievement in life, and hence in work.

For management doctrines articulated in these terms, the new political salience accorded to an entrepreneurial identity for the individual

opened a fertile territory for the development of a variety of programs for reinvigorating personal and economic existence. The "enterprising" activities of businesses, organizations, and individuals, rather than planning and state intervention, would reconcile what was known of "human nature" with the economic imperatives of production and the democratic imperatives of politics. Enterprise here meant not simply an organizational form – that of separate units in competition – but an image of a certain mode of activity that could be applied equally to organizations such as hospitals or universities, to individuals within such organizations whether these be managers or workers, and, more generally, to persons in their everyday existence. The "enterprising self" was a new identity for the employee, one that blurred, or even obliterated, the distinction between worker and manager. The "enterprising self" *was* the active citizen of democracy at work, whether in charge of a particular product division, a large corporation, or a particular set of activities on the shop floor. Whilst much was made, in political programs over this period, of the need to reduce government intervention wherever it was found, the notions of enterprise and the "enterprising self" were not linked to an abolition of expert intervention in work, but gave rise to new strategies for seeking to govern the workplace. Individuals had to be governed in light of the fact that they each sought to conduct their lives as a kind of enterprise of the self, striving to improve the "quality of life" for themselves and their families through the choices that they took within the marketplace of life.[71] The task for management was to ensure that the maximum benefit to the firm was obtained through the interplay of these autonomous entities, each seeking to maximize its own advantage in a competitive market, taking risks, striving to do better, calculating what would best advance its own interests.

The emergence of concepts and practices of enterprise as central to the mentalities of politics was more than a matter of reference to certain texts of neo-liberal political philosophy.[72] It entailed the elaboration of a new territory for political debate and contestation, running across the political spectrum, in which the self-actualizing individual was to provide the basis and presupposition for the formulation and evaluation of political strategies and the transformation of social and economic life. Once more, governmental reason was to found itself upon a certain conception of the subjective identity of the person, once more an ethic of personal identity was to underpin and inspire intervention in a range of specific sites, of which the world of production was to be central. It was in these terms that new relations were to be established among production, identity, and democracy.

456

In the writings of a host of management experts and theorists of the organization, and in a multitude of political pronouncements, work was reconceptualized as a realm where productivity would be maximized, innovation assured, quality enhanced, and staff commitment achieved when the worker – whether manager, technician, administrator, or shop-floor laborer – could actualize him- or herself through work.[73] This was no longer a question of managing the relations of the workplace to ensure satisfaction, but rather of making use of the desire of all individuals to be creative, autonomous, and to strive to improve themselves and their performance if offered encouragement and reward. Bureaucracy, large-scale work organization, hierarchy, and the like were to be perceived in a new light, as obstacles that mitigated against enterprise and self-realization, and that diminished the flexibility that was necessary for the full engagement of the aspirations of the person with the activity of production. Work was to become an essential element in the path for the self-realization of individual identity; simultaneously, the struggle for self-improvement, if it could be linked up to the objectives of the organization, would provide the surest foundation for economic success. A thousand training courses, self-help manuals, and exemplary autobiographies of the successful would operate in these terms.[74] A re-worked expertise of work and the worker would once more align political problematizations and regimes of subjectivity in programs for the government of work. Success and failure at work were now to figure integrally in the self-evaluation, self-judgment, and self-improvement techniques of the individual, whether office worker, factory manager, or potential management high flyer.

In these new ways of managing work, whose destiny and consequences are still unclear, a new alignment is forged within rationalities of management among conceptions of personal identity, images of the enterprise and the sphere of production, and political and cultural values concerning the nature of work and the workplace in a democracy. Most importantly, a new alliance is formed between the progressive and democratic aspirations of those who wish to humanize work, the entrepreneurial and individualistic images of the worker set out in the writings of management consultants, and the devices and techniques of the new psychological culture.[75] The new interventions in work can utilize the whole range of psychological techniques for retraining workers and managers alike. These techniques are themselves multiplicities; they can be linked up with a variety of aspirations and concerns. They are personally desirable, for they promise to help participants "know themselves," that is, to increase and sharpen their own

self-knowledge and self understanding. They are commercially com-
pelling, for they answer to the commercial logic of improving produc-
tivity, competitiveness, and the like. They are practicable, for they take
shape in a range of techniques, devices, and gadgets that can be utilized
in the day-to-day world of office or factory. And they are profoundly
ethical, for in equipping the authority of the manager with a psycho-
logical coloration, they make its exercise almost a therapeutic activity.

Once more, changing regimes of production can be seen as a central
site for the genealogy of identity. Work is no longer a locus for social
government through the socializing consequences of productive labor;
it is now one amongst a number of locales in which the personal logic
of autonomous subjectivity is to be harnessed to national ends. The
individual is now to be fulfilled *in* work, a realm now construed as one
in which we produce, discover, and experience our selves, rather than
to be emancipated *from* work, perceived as merely a means to end. The
firm and the polity are to provide mirror images of each other, as
locales as diverse as the home, the factory, and the market place are
re-jigged as sites in which enterprising individuals can fulfill them-
selves.

Conclusion

In this article, we propose an analysis of work reform from the perspec-
tive of government. We argue for a positive analysis of all those dreams
and schemes for the calculated administration of life that seek to make
operable a particular identity for the worker, and at the same time to
embody principles compatible with a particular understanding of
democracy. And we suggest that psycho-social expertise has acquired a
vital place in the diverse attempts to link individuals subjectively and
emotionally to their productive activity. For in the attempts of work
reformers of varying kinds to accord meaning to work, a space has
been opened up for the elaboration of a body of knowledges of work
and of the worker. Programs of work reform are, we argue, intrinsically
"performative." They provide ways of imagining the nature of work that
are reciprocally related to conceptions of the nature of the individual
who is to carry it out. Alignments among production, identity, and
democracy are forged in large part by those expertises that claim a
knowledge of both the technical nature of work and the psycho-social
nature of the worker.

To locate work reform on the register of government is to address indirectly the issue of authority in liberal democratic societies.[76] For a claim to expertise based in knowledge is an ethical condition for the exercise of authority in so many domains of such societies. The authority of authorities to act upon the actions of others is established to the extent that such actions can be seen to be secured on the basis of a "true" understanding of the nature of the entity to be governed. Before employers can be persuaded to engage in costly and risky experiments with their production processes, those who promise efficiency gains to management as well as personal fulfilment to workers and unions have to establish a set of legitimated claims to competence. And, insofar as the programs of work reform that we have analyzed here appeal to democratic principles, the knowledge of the worker and of work has itself to be congruent with prevailing conceptions of the rights and responsibilities of citizens in a democracy.

Perhaps this is most clearly illustrated by two parallel recent examples. The first comes from the United States where the twin themes of responsibility and autonomy are being articulated in relation to advances in technology such as the increased usage of robotics and computer integrated manufacturing, as well as in relation to issues of economic citizenship. The image of a joint optimization of personal satisfaction and of the production process has arisen in the United States in part as a way of diagnosing the "problems" of American industry and in part as a way of seeking to program its future. American industry has been indicted for producing goods of inferior quality, for inefficiency, for seeking short-term profits at the expense of long-term goals, and more generally for having failed to keep pace with foreign producers. The "rediscovery of the factory" in political discourse is as much a self-critique as an attempt to transform American industry.[77] This problematization of the factory has come to be linked up to a rethinking of the type of identity that is appropriate to the worker as an individual to be endowed with responsibility and autonomy within a newly reconfigured production process, one organized according to Just-In-Time principles and the dictates of "customer-driven manufacturing." As the recent report of an MIT Commission on Industrial Productivity argues, individuals should be given "a larger responsibility for organizing the production process," enabling them to "experience a new measure of mastery and independence on the job that could go well beyond maximizing productivity and extend to personal and professional satisfaction and well-being."[78] This appeal for a new identity of the worker goes hand in hand with calls for "employee empowerment."[79]

This vision of a new identity for the worker, and the call for new relationships to be formed among employees, corporations, and technology should, no doubt, be treated very cautiously in the context of global production regimes that are increasingly represented in terms of a responsiveness to customer needs. Whilst the rhetoric of the "new economic citizenship"[80] makes much of the increased responsibility to be accorded to workers, in identifying international competitiveness as the key to America's problems, it also paves the way for a reorganization of production regimes that could well rebound harshly on those who are called upon to give so much more of themselves in their work. Nonetheless, before we rush to adjudge these arguments as merely one more version of an ideology whose real motive is pacification and exploitation, we might set this discourse against the words of someone operating from within a radically different experience of work.

Writing before he became the President of Czechoslovakia, Vaclav Havel described the "catastrophic effect" that a nationalized and centralized economy has on what is, for him, most crucial: the relationships between an individual and his or her co-workers, between subordinates and their superiors, between an individual and his or her work, between work and its consequences. He continued "All the natural motive forces of economic life, such as human inventiveness and enterprise, just payment for work done, market relations, competition and so on, are scrapped.... People lose – and this is the worst of all – any contact whatsoever with the meaning of their work."[81] Drawing attention to the similarities between the consequences of depersonalization and loss of meaning in the organization of work under command systems, and those in enormous private multinational corporations – which are almost like socialist states – Havel argued that the traditional debate over the ownership of the means of production is not the main problem: the most important thing is that humans should be the measure of all structures, that, as far as economic organization is concerned, the political question should be: "what contributes to the general good of the human being, and what, on the contrary, destroys it":

> The most important thing today is for economic units to maintain – or, rather, renew – their relationship with individuals, so that the work that people perform has human substance and meaning, so that people can see into how the enterprise they work for works, have a say in that, and assume responsibility for it. Such enterprises must have – I repeat – a human dimension; people must be able to work in them as people, as beings with a soul and a sense of responsibility, not as robots, regardless of how primitive or highly intelligent they may be.

The ethical concerns about identity, production, and democracy that animate these two separate arguments from the United States and Czechoslovakia, so similar despite their manifest differences, highlight the dimension that we suggest has been central to the construction and reconstruction of the territory of work over the course of this century. This is not an empirical matter of assessing the extent to which such dreams have been implemented, a question of measuring the discrepancy between ideal and reality. Indeed we suggest that "failure" is intrinsic to such programs. Whilst attempts to reform work are eternally optimistic, they are also eternally judged to have failed, and the reasons for this failure utilized as the basis for further attempts to reform work. The question of success and failure is further complicated because programs of work reform are not coherent and seamless realizations of any one theory or politics: as we have demonstrated they are alliances between multiple and heterogeneous components, and what appears as a "solution" within one program may well appear to be the "problem" for another. But insofar as attempts to govern the world of work are made up of elements ranging from ethical ideals and principles to devices for designing and acting upon the technical composition of the work process, there is an incessant process of seeking to align each with the other so that the technical redesign of the workplace can be conducted in a manner deemed appropriate to a democratic society.

To analyze such a process is not to arbitrate on whether it is essentially humanizing or dehumanizing, liberating or imprisoning. For to do so is to presuppose that a particular device or argument is "good" or "bad" in and of itself. Whereas what we suggest here is the importance of analyzing an ensemble of norms and practices, an assemblage of ideas and devices, a complex of ways of thinking and ways of intervening that seek to regulate and shape the world of work and the politics of work at any particular time. We have argued that ethical concerns about the nature of work are themselves shaped by the changing identity for the person – as psychophysiological machine, as an adjusted or maladjusted individual, as a social being seeking solidarity, as a responsible and autonomous subject, as a creature striving for actualization, or as an "enterprising self" – elaborated by psychological expertise. They are shaped also by the various issues in relation to which work has been problematized – social unrest, maladjustment, industrial conflict, falling productivity, international competitiveness, innovation, flexibility, and democratic deficit.

Analyzing work from this perspective illustrates its crucial importance for a genealogy of identity. For it is in work, as much as in "private life," that human beings have been required to civilize themselves and encouraged to discover themselves. It is around work, as much as around sexuality, that truths about the nature of humans as persons have been elaborated, and that norms and judgments about the conduct of individuals have crystallized. It is in relation to work, as much as in relation to intimacy, that authorities have gained a legitimated competence to pronounce truths about persons and about the ways in which their − our − lives should be conducted. And it is in work, as much as in some realm outside the factory gates, that we have been taught the techniques of life conduct, of fashioning and monitoring ourselves in order to become a laborer, a worker on the production line, a foreman, a manager. A genealogy of subjectivity needs to address the intrinsic links among these attempts to create and recreate the identity of individuals in the sphere of production, and the broader issue of the government of individuals in a democracy.

Acknowledgments

Notes

1. A number of commentators have recently addressed these issues from a variety of perspectives. See for instance: S. Hall and M. Jacques, editors, *New Times: The Changing Face of Politics in the 1990s* (London: Lawrence & Wishart, 1989); D. Harvey, *The Condition of Postmodernity: An Enquiry into the Origins of Cultural Change* (Cambridge, Mass.: Blackwell, 1989); F. Jameson, *Postmodernism or the Cultural Logic of Late Capitalism* (London: Verso, 1991); M. J. Piore and C. F. Sabel, *The Second Industrial Divide: Possibilities for Prosperity* (New York: Basic Books, 1984); C. Sabel, "Moebius-strip organizations and open labor markets," in

P. Bourdieu and J. S. Coleman, editors, *Social Theory for a Changing Society* (Boulder, Colorado: Westview Press, 1991); S. Zuboff, *In the Age of the Smart Machine* (Oxford: Heinemann, 1988); S. Zukin, *Landscapes of Power: From Detroit to Disney World* (Berkeley: University of California Press, 1991).

2. See, for instance: Z. Bauman, *Freedom* (Milton Keynes: Open University Press, 1988); U. Beck, *Risk Society: Towards a New Modernity* (London: Sage, 1992); A. Giddens, *Modernity and Self-Identity* (Cambridge: Polity, 1991).

3. M. Alvesson, *Organizational Theory and Technocratic Consciousness: Rationality, Ideology and Quality of Work* (Berlin: De Gruyter, 1987); P. Anthony, *The Ideology of Work* (London: Tavistock, 1977); I. Berg et al., *Managers and Work Reform: A Limited Engagement* (New York: Free Press, 1979); G. Hunnius, "On the nature of capitalist-initiated innovations in the workplace," in T. R. Burns et al., editors, *Work and Power: The Liberation of Work and the Control of Political Power* (London: Sage, 1979); R. Sennett, "The boss's new clothes," *New York Review of Books* (22 February 1979): 42–46.

4. See for instance: H. Braverman, *Labor and Monopoly Capital: The Degradation of Work in the Twentieth Century* (New York: Monthly Review Press, 1974); A. Lipietz, *Towards a New Economic Order: Postfordism, Ecology and Democracy* (Cambridge: Polity Press, 1992); D. F. Noble, *America by Design: Science, Technology and the Rise of Corporate Capitalism* (Oxford: Oxford University Press, 1977); D. Noble, *Forces of Production: A Social History of Industrial Automation* (New York: Oxford University Press, 1984); S. Wood, editor, *The Degradation of Work? Skill, Deskilling and the Labour Process* (London: Hutchinson & Co., 1982); S. Wood, editor, *The Transformation of Work? Skill, Flexibility and the Labour Process* (London: Unwin Hyman, 1989).

5. T. R. Burns and V. Rus, 1979, p. 1. Introduction and Overview. In T. R. Burns, L. E. Karlsson, and V. Rus, *Work and Power: The Liberation of Work and the Control of Political Power* (London: Sage, 1979).

6. There are of course exceptions to the above characterization. See, for example: S. Clegg, *Modern Organizations: Organization Studies in the Postmodern World* (London: Sage, 1990); J. Donzelot, "Pleasure in work," in G. Burchell, C. Gordon, and P. Miller, editors, *The Foucault Effect: Studies in Governmentality* (London: Harvester Wheatsheaf, 1991); P. DuGay, "Enterprise culture and the ideology of excellence," *New Formations*, Vol. 13 (1993); P. Hirst and J. Zeitlin, editors, *Reversing Industrial Decline? Industrial Structure and Policy in Britain and her Competitors* (Oxford: Berg, 1989); P. Hirst & J. Zeitlin, "Flexible specialization versus post-Fordism: Theory, evidence and policy implications," *Economy and Society* 20/1 (Feb. 1991): 1–56; E. Matzner and W. Streeck, editors, *Beyond Keynesianism: The Socioeconomics of Production and Employment* (London: Elgar, 1991). For different approaches to the issue of identity, see for instance: A. Giddens, *Modernity and Self-Identity: Self and Society in the Late Modern Age* (Cambridge: Polity, 1991); W. Hollway, *Work Psychology and Organizational Behaviour: Managing the Individual at Work* (London: Sage, 1991); D. Knights and H. Willmott, "Power and subjectivity at work: From degradation to subjugation in social relations," *Sociology* Vol. 23/4 (1989): 535–558.

7. For related concerns with identity formation, see: I. Hacking, "Making up people," and J. W. Meyer, "Myths of socialization and of personality," both in T. C. Heller, M. Sosna, and D. E. Wellbery, *Reconstructing Individualism: Autonomy, Individuality and the Self in Western Thought* (Stanford: Stanford University Press, 1986).

8. Of course, conceptions of the human person were also bound up with the govern-

ment of work in communist and fascist nations. We do not discuss these here. However, it is notable that as the economies of the former Soviet Union and its satellites seek to transform themselves along liberal, democratic, and market principles, they too have called upon new images of the worker and new experts of work.

9. On the notion of government used here, see: P. Miller and N. Rose, "Governing economic life," *Economy and Society* (February 1990): 1–31; N. Rose and P. Miller, "Political power beyond the state: Problematics of government," *British Journal of Sociology* 43/2 (June, 1992): 173–205.

10. Interestingly, one recent and fashionable text for the reform of political power reveals very clearly the relations between the exercise of political power and changing conceptions of persons and how to act upon them to achieve desired results. See D. Osborne and T. Gaebler, *Reinventing Government: How the Entrepreneurial Spirit is Transforming the Public Sector* (Reading, Mass.: Addison-Wesley, 1992).

11. N. Rose, "Calculable minds and manageable individuals," *History of the Human Sciences* 1/2 (October, 1988): 179–200; P. Miller and T. O'Leary, "Accounting and the construction of the governable person," *Accounting Organizations and Society* 12/3 (1987): 235–265.

12. P. Miller, "Accounting and objectivity: The invention of calculating selves and calculable spaces," in A. Megill, editor, *Rethinking Objectivity* (Durham: Duke University Press, 1994); P. Miller and T. O'Leary, "Governing the calculable person," in A. G. Hopwood and P. Miller, editors, *Accounting as Social and Institutional Practice* (Cambridge: Cambridge University Press, 1994); P. Miller and T. O'Leary, "Hierarchies and American ideals, 1900–1940," *Academy of Management Review* 14/2 (1989): 250–265.

13. P. Miller and T. O'Leary, "Hierarchies and American ideals, 1900–1940," *Academy of Management Review* 14/2 (1989): 250–265, 256.

14. J. Donzelot, "Pleasure in work," in G. Burchell, C. Gordon, and P. Miller, editors, *The Foucault Effect* (London: Harvester Wheatsheaf, 1991).

15. V. E. Fisher and J. V. Hanna, *The Dissatisfied Worker* (New York: Macmillan, 1932); C. S. Myers, *Industrial Psychology in Great Britain* (London: Cape, 1927); M. S. Viteles, *Industrial Psychology* (New York: Norton, 1932). On these developments, see: P. Miller, "Psychotherapy of work and unemployment," in P. Miller and N. Rose, editors, *The Power of Psychiatry* (Cambridge: Polity Press, 1986), 143–176.

16. E. Mayo, *The Human Problems of an Industrial Civilization* (New York: Macmillan, 1933); F. J. Roethlisberger and W. J. Dickson, *Management and the Worker* (Cambridge: Harvard University Press, 1939).

17. N. Rose, *Governing the Soul: The Shaping of the Private Self* (London: Routledge, 1990); N. Rose, "Social psychology as a science of democracy," in *Inventing Our Selves* (New York: Cambridge University Press, 1996).

18. P. Miller, "Psychotherapy of work and unemployment," 143–176.

19. M. Dean, *The Constitution of Poverty* (London: Routledge, 1990); G. Procacci, "Social economy and the government of poverty," in G. Burchell, C. Gordon, and P. Miller, editors, *The Foucault Effect: Studies in Governmentality* (London: Harvester Wheatsheaf, 1991): 151–168; G. Procacci, *Gouverner la misère: la question sociale en France, 1789–1848* (Paris: Éditions du Seuil, 1993).

20. P. Miller, "Psychotherapy of work and unemployment," 143–176.

21. A. A. Berle and G. C. Means, *The Modern Corporation and Private Property* (New York: Macmillan, 1932); F. D. Roosevelt, *Collected Papers, 1938* (New York: Mac-

millan, 1941). For an overview of these critiques of the large corporation, see: P. Miller and T. O'Leary, "Hierarchies and American ideals, 1900–1940," *Academy of Management Review* 14/2 (1989): 250–265.

22. J. Tomlinson, "The politics of economic measurement: The rise of the 'productivity problem' in the 1940s," in A. G. Hopwood and P. Miller, editors, *Accounting as Social and Institutional Practice* (Cambridge: Cambridge University Press, 1994).

23. For a discussion of the British experience, see: A. Bullock, *Report of the Committee of Enquiry on Industrial Democracy* (London: HMSO, 1977); J. Elliot, *Conflict or Cooperation: The Growth of Industrial Democracy* (London: Kogan Page, 1978).

24. On these developments, see: N. Rose, "Social psychology as a science of democracy," in *Inventing Our Selves.*

25. G. R. Taylor, *Are Workers Human?* (London: Falcon Press, 1950) 12–13.

26. N. Rose, *Governing the Soul: The Shaping of the Private Self* (London: Routledge, 1990), 87.

27. M. Rose, *Industrial Behaviour: Theoretical Developments Since Taylor* (London: Allen Lane, 1975).

28. M. Rose, *Reworking the Work Ethic* (London: Batsford, 1985); D. Yankelovitch et al., *Work and Human Values: An International Report on Jobs in the 1980s and 1990s* (New York: Aspen Institute, 1983).

29. P. Miller, and T. O'Leary, "The factory as laboratory," *Science in Context* 7/3 (December 1994: 469–496).

30. F. E. Emery, *Characteristics of Socio-Technical Systems*, Human Resources Centre, Tavistock Institute of Human Relations, Doc. 527 (1959); F. E. Emery, *The Democratisation of the Work Place*, Human Resources Centre, Tavistock Institute of Human Relations, Doc. T.813 (1966); F. E. Emery, and E. Thorsrud, *Democracy at Work* (Leiden: Martinus Nijhof, 1976); E. L. Trist, *The Evolution of Socio-Technical Systems: A Conceptual Framework and Action Research Programme*, Occasional Paper 2, Ontario, Quality of Working Life Centre, Ontario, Ministry of Labour (1981); E. L. Trist, "The socio-technical perspective," in A. van de Ven and W. F. Joyce, editors, *Perspectives on Organizational Design and Behaviour* (New York: Wiley, 1981).

31. F. E. Emery and E. L. Trist, *Socio-Technical Systems* (Oxford: Pergamon Press, 1960); E. Jacques, *The Changing Culture of a Factory* (London: Tavistock Publications, 1951); A. K. Rice, *Productivity and Social Organization: The Ahmedabad Experiment* (London: Tavistock, 1958); E. L. Trist and K. Bamforth, "Some social and psychological consequences of the longwall method of coal-getting," *Human Relations* 4 (1951): 3–38.

32. F. E. Emery, *Characteristics of Socio-Technical Systems*, Human Resources Centre, Tavistock Institute of Human Relations, Doc. 527 (1959).

33. A. K. Rice, *Productivity and Social Organization: The Ahmedabad Experiment* (London: Tavistock, 1958).

34. The original published statement is in F. E. Emery and E. L. Trist, *Socio-Technical Systems* (Oxford: Pergamon Press, 1960). This led to the influential paper on "The causal texture of organizational environments," *Human Relations* (1965), 18: 21–32, which not only classifies four types of environments making different demands upon the organization, but introduces the notion of "turbulent fields" or turbulent environments – rapidly changing, intervened in by legislation and by political forces, powered by research and development – all increasing the area of *relevant uncertainty* for organizations, in which the influences upon, and the consequences of actions, are increasingly unpredictable. Here socio-technical design has the

apparent capacity to specify the types of organization system that will prosper in such a turbulent environment – another blow for the notions of hierarchy and rational planning and in favor of flexible matrix forms.

35. F. E. Emery, *Characteristics of Socio-Technical Systems*, Human Resources Centre, Tavistock Institute of Human Relations, Doc. 527F (1959); F. E. Emery and E. Thorsrud, *Democracy at Work* (Leiden: Martinus Nijhof, 1976); K. Lewin, *Field Theory in Social Science: Selected Theoretical Papers*, edited by D. Cartwright (New York: Harper, 1951). L. E. Davis, "Towards a theory of job design," *Journal of Industrial Engineering* 8 (1957): 305–309 and the papers collected in L. E. Davis and J. C. Taylor, editors, *Design of Jobs* (Harmondsworth: Penguin, 1972).

36. N. Q. Herrick and M. Maccoby, "Humanizing work: A priority goal of the 1970s," in L. E. Davis and A. C. Cherns, *The Quality of Working Life*, Vol. 1: *Problems, Prospects and the State of the Art* (New York: Free Press, 1975); M. Rose, *Re-working the Work Ethic* (London: Batsford, 1985); A. T. M. Wilson, "Quality of working life: An introductory overview," manuscript (n.d.); N. A. B. Wilson, *On the Quality of Working Life*, Manpower Papers No. 7, London, H. M. S. O. (1973).

37. N. Q. Herrick and M. Maccoby, "Humanizing work: A priority goal of the 1970s," in L. E. Davis and A. C. Cherns, *The Quality of Working Life*, Vol. 1: *Problems, Prospects and the State of the Art* (New York: Free Press, 1975), 66.

38. N. Q. Herrick and M. Maccoby, "Humanizing work: A priority goal of the 1970s."

39. E. G. Flamholtz, *Human Asset Accounting* (Dickenson, 1974); A. G. Hopwood, "Economic costs and benefits of new forms of work organisation," in International Labour Office, *New Forms of Work Organisation*, Vol. 2 (Geneva, 1979); R. Likert, *The Human Organization: Its Management and Value* (New York: McGraw-Hill, 1967).

40. D. Jenkins, *Job Power* (New York: Doubleday, 1973); A. Myrdal, *Towards Equality* (Stockholm: Prisma Press, 1971).

41. J. Elliot, *Conflict or Cooperation: The Growth of Industrial Democracy* (London: Kogan Page, 1978), 197–202; P. G. Gyllenhammar, *People at Work* (London: Addison Wesley, 1977).

42. J. Elliot, *Conflict or Cooperation: The Growth of Industrial Democracy* (London: Kogan Page, 1978).

43. M. Weir, editor, *Job Satisfactions: Challenge and Response in Modern Britain* (London: Fontana, 1976).

44. R. Chichester-Clark, *Personnel Management*, 22 (1973): 26–29 quoted in M. Weir, editor, *Job Satisfactions: Challenge and Response in Modern Britain* (London: Fontana, 1976).

45. S. Cotgrove, J. Dunham, and C. Vamplew, *The Nylon Spinners* (George Allen and Unwin, 1971); G. Edward, *Readings in Group Technology* (London: Machinery Publishing, 1971); P. Hill, *Towards a New Philosophy of Management* (London: Gower, 1971); W. J. Paul, and K. Robertson, *Job Enrichment and Employee Motivation* (London: Gower, 1970).

46. A. Cherns, "Better working life – a social scientist's view," *Occupational Psychology*, 47 (1973): 23–28; R. Cooper, "How jobs motivate," *Personnel Review* 2/2 (1973): 4–12; L. E. Davis, and J. C. Taylor, editors, *Design of Jobs* (London: Penguin, 1972); A. Little and P. Warr, "Who's afraid of job enrichment," *Personnel Management* 3/2 (1971): 34–37.

47. The most significant of these was R. Blauner, *Alienation and Freedom: The Factory Worker and His Industry* (Chicago: University of Chicago Press, 1964).

48. P. Warr, editor, *Personal Goals and Work Design* (London: Wiley, 1976), ix.

49. P. Warr, editor, *Personal Goals and Work Design* (London: Wiley, 1976), x.
50. A. Cherns, "Better working life – a social scientist's view," *Occupational Psychology* 47 (1973): 21. Cited in P. Warr, editor, *Personal Goals and Work Design* (London: Wiley, 1976).
51. L. Klein, *New Forms of Work Organization* (Cambridge: Cambridge University Press, 1976).
52. J. L. Burbige, *Final report on a study of the effects of group production methods on the humanization of work*, prepared at the completion of a study executed under contract to the International Labour Office by the International Centre for Advanced Technical and Vocational Training (Turin, 1976).
53. International Labour Office, *New Forms of Work Organisation*, Vol. 1, (Geneva: ILO, 1979).
54. F. E. Emery and E. L. Trist, "The causal texture of organizational environments," *Human Relations* 18 (1965): 21–32.
55. T. A. Kochan, H. C. Katz, and R. B. McKersie, *The Transformation of American Industrial Relations* (New York: Basic Books, 1986).
56. I. Kristol, "On corporate capitalism in America," *The Public Interest* (Fall 1975): 124–141. Quoted in H. Mintzberg, *Power in and Around Organizations* (Englewood Cliffs: Prentice Hall, 1983), 521.
57. H. Mintzberg, *Power in and Around Organizations*, 525, emphasis in original.
58. S. Terkel, *Working* (New York: Random House, 1972).
59. Work in America, *Work in America: Report of a Special Task Force to the Secretary of Health, Education and Welfare* (Cambridge: MIT Press, 1973), xv.
60. Work in America.
61. Work in America.
62. L. E. Davis, "Enhancing the quality of working life: Developments in the United States," *International Labour Review* (July-Aug 1977): 53–65.
63. E. L. Trist, editor, *On the Quality of Working Life* (Toronto, 1982).
64. E. L. Trist, "The socio-technical perspective," in A. van de Ven and W. F. Joyce, editors, *Perspectives on Organizational Design and Behaviour* (New York: Wiley, 1981).
65. These are discussed at length in M. Rose, *Reworking the Work Ethic* (London: Batsford, 1985).
66. N. Rose, "Governing the enterprising self," in P. Heelas and P. Morris, editors, *The Values of the Enterprise Culture* (London: Routledge, 1992); N. Rose, "Expertise and the government of conduct," *Studies in Law, Politics and Society*, Vol. 14 (November 1994): 359–397.
67. See T. R. Pascale and A. G. Athos, *The Art of Japanese Management* (New York: Simon and Schuster, 1981); P. J. Alston, *The American Samurai: Blending Japanese and American Management Practices* (New York: De Gruyter, 1985).
68. C. Argyris, *Integrating the Individual and the Organization* (New York: Wiley, 1964), 33–34.
69. N. Rose, "Governing the enterprising self," in P. Heelas and P. Morris, editors, *The Values of the Enterprise Culture: The Moral Debate* (London: Routledge, 1992).
70. These issues are discussed at greater length in N. Rose, *Governing the Soul: The Shaping of the Private Self* (London: Routledge, 1990), chapter 10.
71. C. Gordon, "Governmental rationality: An introduction," in G. Burchell, C. Gordon, and P. Miller, editors, *The Foucault Effect* (Brighton: Harvester, 1991).
72. M. Friedman and R. Friedman, *Free to Choose* (London: Seeker and Warburg: 1982); F. von Hayek, *The Constitution of Liberty* (London: Routledge and Kegan Paul, 1976).

73. See, for instance: M. L. Dertouzos, R. K. Lester, and R. M. Solow, *Made in America: Regaining the Productive Edge* (Cambridge, Mass.: MIT Press, 1989); R. M. Kanter, *When Giants Learn to Dance: Mastering the Challenges of Strategy, Management, and Careers in the 1990s* (New York: Simon & Schuster, 1989); T. J. Peters and R. H. Waterman, *In Search of Excellence: Lessons from America's Best-Run Companies* (New York: Harper & Row, 1982). For a review of the early contributions to this literature, cf. M. Rose, *Reworking the Work Ethic* (London: Batsford, 1985).

74. For some examples of the autobiographical mode, see C. Hickmann and M. Silva, *Creating Excellence: Managing Corporate Culture, Strategy and Change in the New Age* (London: Allen and Unwin, 1985): G. Pinchot, *Intrapreneuring: Why You Don't Have to Leave the Corporation to Become an Entrepreneur* (New York: Harper and Row, 1985); B. Rogers, *The IBM Way: Insights into the World's Most Successful Marketing Organization* (New York: Harper and Row, 1986); C. Garfield, *Peak Performers: The New Heroes in Business* (London: Hutchinson, 1986); V. Kiam, *Going For it: How to Succeed as an Entrepreneur* (New York: Collins, 1986); W. Avis, *Take a Chance to Be First: The Secrets of Entrepreneurial Success* (New York: Macmillan, 1986). These books and others were all perceptively reviewed by Patrick Wright, "Excellence," *London Review of Books*, 21 May 1987.

75. J. Donzelot, "Pleasure in work," in G. Burchell, C. Gordon, and P. Miller, editors, *The Foucault Effect* (London: Harvester Wheatsheaf, 1991), 23.

76. P. Miller and N. Rose, "On therapeutic authority: Psychoanalytical expertise under advanced liberalism," *History of the Human Sciences* 7/3 (August 1994): 29–64.

77. P. Miller and T. O'Leary, "Accounting expertise and the politics of the product," *Accounting, Organizations and Society* 18, 2/3 (1993): 187–206; P. Miller and T. O'Leary, "Accounting, 'economic citizenship,' and the spatial reordering of manufacture," *Accounting, Organizations and Society* 19/1 (1994): 15–43.

78. M. L. Dertouzos, R. K. Lester, and R. M. Solow, *Made in America: Regaining the Productive Edge* (Cambridge, Mass.: MIT, 1989), 135.

79. H. T. Johnson, *Relevance Regained: From Top-Down Control to Bottom-Up Empowerment* (New York: The Free Press, 1992).

80. M. L. Dertouzos, R. K. Lester, and R. M. Solow, *Made in America: Regaining the Productive Edge*.

81. V. Havel, *Disturbing the Peace*, trans. P. Wilson, from original published in Czech in 1986 (New York: Knopf, 1990), 13.

82. V. Havel, *Disturbing the Peace*.