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Governing economic life

Peter Miller and Nikolas Rose

Abstract

This paper proposes some new ways of analysing the exercise of political power in advanced liberal democratic societies. These are developed from Michel Foucault's conception of 'governmentality' and addresses political power in terms of 'political rationalities' and 'technologies of government'. It draws attention to the diversity of regulatory mechanisms which seek to give effect to government, and to the particular importance of indirect mechanisms that link the conduct of individuals and organizations to political objectives through 'action at a distance'. The paper argues for the importance of an analysis of language in understanding the constitution of the objects of politics, not simply in terms of meaning or rhetoric, but as 'intellectual technologies' that render aspects of existence amenable to inscription and calculation. It suggests that governmentality has a characteristically 'programmatic' form, and that it is inextricably bound to the invention and evaluation of technologies that seek to give it effect. It draws attention to the complex processes of negotiation and persuasion involved in the assemblage of loose and mobile networks that can bring persons, organizations and objectives into alignment. The argument is exemplified through considering various aspects of the regulation of economic life: attempts at national economic planning in post-war France and England; the role ascribed to changing accounting practices in the UK in the 1960s; techniques of managing the internal world of the workplace that have come to lay special emphasis upon the psychological features of the producing subjects. The paper contends that 'governmentality' has come to depend in crucial respects upon the intellectual technologies, practical activities and social authority associated with expertise. It argues that the self-regulating capacities of subjects, shaped and normalized through expertise, are key resources for governing in a liberal-democratic way.

In advanced liberal democracies, political power has come to embrace many facets of economic, social and personal existence. Political power is exercised today through a multitude of agencies and techniques, some of which are only loosely associated with the executives and bureaucracies of the formal organs of state. In this paper we suggest that Michel Foucault's concept of 'government' provides a potentially fruitful way of analysing the shifting ambitions and concerns of all those social authorities that have sought to administer the lives of individuals and associations, focusing our attention on the diverse mechanisms through which the actions and judgements of persons

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and organizations have been linked to political objectives (e.g. Foucault 1979). We argue that an analysis of modern 'government' needs to pay particular attention to the role accorded to 'indirect' mechanisms for aligning economic, social and personal conduct with socio-political objectives. We draw upon some recent work in the sociology of science and technology in analysing these mechanisms, borrowing and adapting Bruno Latour's notion of 'action at a distance' (cf. Latour 1987b). We argue that such action at a distance mechanisms have come to rely in crucial respects upon 'expertise': the social authority ascribed to particular agents and forms of judgement on the basis of their claims to possess specialized truths and rare powers. And we contend that the self-regulating capacities of subjects, shaped and normalized in large part through the powers of expertise, have become key resources for modern forms of government and have established some crucial conditions for governing in a liberal democratic way.

We begin with a general discussion which sets out and seeks to develop the concept of 'governmentality'. In the remainder of the paper we seek to exemplify the mechanisms and processes discussed through a consideration of various aspects of the 'government' of economic life. We consider the 'government' of 'the economy', firstly through centralized systems of economic planning, and secondly through attempts to transform the calculative procedures of economic actors. We then turn to the 'government' of the internal world of the enterprise and examine this in relation to the changing techniques of management. We argue that management has come to depend upon expertise not only concerning the technical features of production, but also concerning the psychological features of the producing subjects. Finally, we look at the techniques by which the self-regulating capacities of subjects have become vital resources and allies for the 'government' of economic life, especially insofar as they have come to be understood and regulated in terms of the notions of autonomy and self-fulfilment. We link this to some remarks on contemporary transformations in 'governmentality'.

First, let us consider the notion of government. Michel Foucault argued that a certain *mentality*, that he termed 'governmentality', had become the common ground of all modern forms of political thought and action. Governmentality, he argued, was an 'ensemble formed by the institutions, procedures, analyses and reflections, the calculations and tactics, that allow the exercise of this very specific albeit complex form of power' (Foucault 1979: 20). And, he claimed, since the eighteenth century *population* had appeared as the terrain *par excellence* of government. Authorities have addressed themselves to the regulation of the processes proper to the population, the laws that modulate its wealth, health, longevity, its capacity to wage war and to engage in labour and so forth. Thus, he implies, societies like our own are characterized by a particular way of *thinking* about the kinds of problems that can and should be addressed by various authorities. They operate within a kind of political *a priori* that allows the tasks of such authorities to be seen in terms of the calculated supervision, administration and maximization of the forces of each and all.

This way of investigating the exercise of political rule has a number of advantages. Firstly, it refuses the reduction of political power to the actions of a State, the latter construed as a relatively coherent and calculating political subject. Instead of viewing rule in terms of a State that extends its sway throughout society by means of a ramifying apparatus of control, the notion of government draws attention to the diversity of forces and groups that have, in heterogeneous ways, sought to regulate the lives of individuals and the conditions within particular national territories in pursuit of various goals. Rather than ‘the State’ giving rise to government, the state becomes a particular form that government has taken, and one that does not exhaust the field of calculations and interventions that constitute it.

It is to the analysis of these aspirations and attempts that the notion of government directs us. This path may appear to lead, in a rather idiosyncratic way, to a familiar and well-trodden field – that of the historical and contemporary analysis of economic and social policy. However, the apparent familiarity of these concerns is likely to mislead. It is true that the earliest forms of governmentality in Europe went under the name of the science of ‘police’, and that ‘police’ and ‘policy’ share a common root. But the analysis of policy suggested by the concept of government implies that the very existence of a field of concerns termed ‘policy’ should itself be treated as something to be explained. It draws attention to the fundamental role that knowledges play in rendering aspects of existence thinkable and calculable, and amenable to deliberated and planful initiatives: a complex *intellectual* labour involving not only the invention of new forms of thought, but also the invention of novel procedures of documentation, computation and evaluation. It suggests that we need to consider under what ethical conditions it became possible for different authorities to consider it legitimate, feasible and even necessary to conduct such interventions. It suggests that the concerns that have occasioned and animated policy are not self-evident. The emergence of unemployment, crime, disease and poverty as ‘problems’ that can be identified and construed as in need of amelioration is itself something to be explained. It points to the diversity of the groupings that have problematized such aspects of existence in relation to social and political concerns, and that have developed and sought to implement policies. These are not just ‘political’ authorities, in the traditional sense, but also those whose basis is intellectual, spiritual, and so forth. It implies that there is no smooth path of development or evolution of policies, but that lasting inventions have often arisen in surprising and aleatory fashion and in relation to apparently marginal or obscure difficulties in social or economic existence, which for particular reasons have come to assume political salience for a brief period.

Hence the notion of government highlights the diversity of powers and knowledges entailed in rendering fields practicable and amenable to intervention. It suggests that the analysis of ‘policy’ cannot be confined to the study of different administrative agencies, their interests, funding, administrative organization and the like. A complex and heterogeneous assemblage of

conditions thus makes it possible for objects of policy to be problematized, and rendered amenable to administration.

Of course, these dimensions can be studied, and have been studied, without drawing upon the notion of government. But the approach suggested by these writings of Michel Foucault has two further features that we consider important. Policy studies tend to be concerned with evaluating policies, uncovering the factors that led to their success in achieving their objectives or, more usually, deciphering the simplifications, misunderstandings, miscalculations and strategic errors that led to their failure (e.g. Williams *et al.* 1986). We, on the other hand, are not concerned with evaluations of this type, with making judgements as to whether and why this or that policy succeeded or failed, or with devising remedies for alleged deficiencies (cf. Thompson 1987). Rather, we are struck by the fact that this very form of thinking is a characteristic of 'governmentality': policies always appear to be surrounded by more or less systematized attempts to adjudicate on their vices or virtues, and are confronted with other policies promising to achieve the same ends by improved means, or advocating something completely different. Evaluation, that is to say, is something internal to the phenomena we wish to investigate. For us, this imperative to evaluate needs to be viewed as itself a key component of the forms of political thought under discussion: how authorities and administrators make judgements, the conclusions that they draw from them, the rectifications they propose and the impetus that 'failure' provides for the propagation of new programmes of government.

'Evaluation' of policy, in a whole variety of forms, is thus integral to what we term the *programmatic* character of governmentality. Governmentality is programmatic not simply in that one can see the proliferation of more or less explicit programmes for reforming reality – government reports, white papers, green papers, papers from business, trade unions, financiers, political parties, charities and academics proposing this or that scheme for dealing with this or that problem. It is also programmatic in that it is characterized by an eternal optimism that a domain or a society could be administered better or more effectively, that reality is, in some way or other, programmable (cf. Gordon 1987; MacIntyre 1981; Miller and O'Leary 1989b; Rose and Miller 1988). Hence the 'failure' of one policy or set of policies is always linked to attempts to devise or propose programmes that would work better, that would deliver economic growth, productivity, low inflation, full employment or the like. Whilst the identification of failure is thus a central element in governmentality, an analysis of governmentality is not itself a tool for social programmers. To analyse what one might term 'the will to govern' is not to enthusiastically participate in it.

The discursive character of governmentality

Governmentality has a discursive character: to analyse the conceptualizations, explanations and calculations that inhabit the governmental field requires an

attention to language. There is nothing novel in the suggestion that language and politics are interrelated, nor even in the suggestion that the relation between the two is neither one of simple homology or reflection, nor one of ideological mystification, but is mutually constitutive (e.g. Shapiro 1984; Connally 1987; Taylor 1987). In relation to economic policy, a number of studies have directly addressed the discursive constitution of the domain and the component parts of the economy. They have demonstrated the conceptual conditions under which it came to be possible to conceive of a specifically economic domain composed of various economic entities with their own laws and processes that were amenable to rational knowledge and calculation, and hence to various forms of regulatory intervention (Birchell *et al.*, 1985; Hopwood 1987; Loft 1986; Tribe 1978; Thompson 1982; Tomlinson 1981a, 1981b, 1983). Jim Tomlinson has argued, in relation to the so-called Keynesian revolution in economic policy making, that whilst objects of economic policy are discursively constructed, such construction is dependent upon a complex and heterogeneous set of conditions that can neither be reduced to a recognition of eternal concerns or an expression of sectional interests, nor to a simple realization of a new economic theory (Tomlinson 1981a). Thus Keynesian policies for the political management of economic activity gained their power in relation to a pre-existing field of problems and depended upon the existence of a range of interlinked agencies, interests, calculations, theories and representations. The concern with 'full employment' in the post-war period depended upon a disparate set of conditions that included Keynesian economic theory, technocracy and total war, and was also made possible by diverse events such as the forced departure from the gold standard in 1931, the growth of government expenditure and a belief in the possibility of extending wartime planning to the post-war period (Tomlinson 1983).

Our approach has much in common with this. But we would like to place these concerns within a rather different framework. On the one hand, we suggest that policy should be located within a wider discursive field in which conceptions of the proper ends and means of government are articulated: an analysis of what Michel Foucault terms 'political rationalities'. On the other hand, we argue for a view of 'discourse' as a technology of thought, requiring attention to the particular technical devices of writing, listing, numbering and computing that render a realm into discourse as a knowable, calculable and administrable object. 'Knowing' an object in such a way that it can be governed is more than a purely speculative activity: it requires the invention of procedures of notation, ways of collecting and presenting statistics, the transportation of these to centres where calculations and judgements can be made and so forth. It is through such procedures of inscription that the diverse domains of 'governmentality' are made up, that 'objects' such as the economy, the enterprise, the social field and the family are rendered in a particular conceptual form and made amenable to intervention and regulation.

Political argument, no doubt, does not have the systematic and coherent character of theoretical discourse. Nonetheless, we suggest, it is possible to

specify and differentiate political rationalities in terms of the relatively systematic discursive matrices within which government is articulated, the particular languages within which its objects and objectives are construed, the grammar of analyses and prescriptions, the vocabularies of programmes, the terms in which the legitimacy of government is established. It is out of such linguistic elements that rationalities of government such as welfarism or neo-liberalism – assemblages of philosophical doctrines, notions of social and human realities, theories of power, conceptions of policy and versions of justice – are elaborated and seek to specify appropriate bases for the organization and mobilization of social life.

All government depends on a particular mode of ‘representation’: the elaboration of a language for depicting the domain in question that claims both to grasp the nature of that reality represented, and literally to represent it in a form amenable to political deliberation, argument and scheming. This gives us a clue to a further way in which language is significant for government. For it is in language that *programmes of government* are elaborated, and through which a consonance is established between the broadly specified ethical, epistemological and ontological appeals of political discourse – to the nation, to virtue, to what is or is not possible or desirable – and the plans, schemes and objectives that seek to address specific problematisations within social, economic or personal existence. For example, in the early years of this century in Britain, the language of national efficiency served both to establish the proper role of government and the kinds of problems that it could and should address, to organize disputes between different political forces, and to articulate a range of different programmes that addressed themselves to managing specific aspects of the economic life and health of the population (Miller and O’Leary 1987; Rose 1985). Language here serves as a *translation mechanism* between the general and the particular, establishing a kind of identity or mutuality between political rationalities and regulatory aspirations.

The forms of political discourse characteristic of ‘governmentality’ open a particular space for theoretical arguments and the truth claims that they entail. The government of a population, a national economy, an enterprise, a family, a child, or even oneself becomes possible only through discursive mechanisms that represent the domain to be governed as an intelligible field with its limits, characteristics whose component parts are linked together in some more or less systematic manner (Burchell *et al.* 1985; Hopwood 1984, 1985, 1986; Miller 1989; Miller and O’Leary 1989a; Rose 1990). Before one can seek to manage a domain such as an economy it is first necessary to conceptualize a set of processes and relations as an economy which is amenable to management. The birth of a language of national economy as a domain with its own characteristics, laws and processes that could be spoken about and about which knowledge could be gained enabled it to become an element in programmes which could seek to evaluate and increase the power of nations by governing and managing ‘the economy’. ‘Government’ that is to say, is always dependent on knowledge, and proponents of diverse programmes seek

to ground themselves in a positive knowledge of that which is to be governed, ways of reasoning about it, analysing it and evaluating it, identifying its problems and devising solutions. Theories here do not merely legitimate existing power relations but actually constitute new sectors of reality and make new fields of existence practicable. Hence, as well as establishing the place of certain objects and problems within the legitimate obligations and powers of rulers, and enabling them to be formulated programmatically, it is through language that governmental fields are composed, rendered thinkable and manageable.

In drawing attention to the role of language in government in this way, we do not wish to suggest that the analysis of political power should become a sub-department of the history of ideas, nor that our concern should be with the problem of meaning. The features of language that we have described have a more active role than this, one perhaps best captured in the term *intellectual technology*. Language, that is to say, provides a mechanism for rendering reality amenable to certain kinds of action. And language, in this sense, is more than merely 'contemplative': describing a world such that it is amenable to having certain things done to it involves inscribing reality into the calculations of government through a range of material and rather mundane techniques (Rose 1988; cf. Latour 1987a). The events and phenomena to which government is to be applied must be rendered into information – written reports, drawings, pictures, numbers, charts, graphs, statistics. This information must be of a particular form – stable, mobile, combinable and comparable. This form enables the pertinent features of the domain – types of goods, investments, ages of persons, health, criminality, etc. – to literally be re-presented in the place where decisions are to be made about them (the manager's office, the war room, the case conference and so forth). From the eighteenth-century invention of statistics as the science of state, to the present attempts to evaluate the economic life of the nation by measuring the money supply or the efficiency of health services by turning their endeavours into cash equivalents, programmes of government have depended upon the construction of devices for the inscription of reality in a form where it can be debated and diagnosed. Information in this sense is not the outcome of a neutral recording function. It is itself a way of acting upon the real, a way of devising techniques for inscribing it (birth rates, accounts, tax returns, case notes) in such a way as to make the domain in question susceptible to evaluation, calculation and intervention.

The technologies of government

'Government', of course, is not only a matter of representation. It is also a matter of intervention. The specificity of governmentality, as it has taken shape in 'the West' over the last two centuries, lies in this complex interweaving of procedures for representing and intervening (cf. Hacking,

1983). We suggest that these attempts to instrumentalize government and make it operable also have a kind of 'technological' form (cf. Foucault 1986; 225–6). If political rationalities render reality into the domain of thought, these '*technologies of government*' seek to translate thought into the domain of reality, and to establish 'in the world of persons and things' spaces and devices for acting upon those entities of which they dream and scheme.

We use the term 'technologies' to suggest a particular approach to the analysis of the activity of ruling, one which pays great attention to the actual mechanisms through which authorities of various sorts have sought to shape, normalize and instrumentalize the conduct, thought, decisions and aspirations of others in order to achieve the objectives they consider desirable. To understand modern forms of rule, we suggest, requires an investigation not merely of grand political schema, or economic ambitions, nor even of general slogans such as 'state control', nationalization, the free market and the like, but of apparently humble and mundane mechanisms which appear to make it possible to govern: techniques of notation, computation and calculation; procedures of examination and assessment; the invention of devices such as surveys and presentational forms such as tables; the standardization of systems for training and the inculcation of habits; the inauguration of professional specialisms and vocabularies; building design and architectural forms – the list is heterogeneous and is, in principle, unlimited.

The classical terminology of political philosophy and political sociology – State v. Civil Society, public v. private, community v. market and so forth – is of little use here. Such language certainly needs to be investigated, to the extent that it functions in important ways within political rationalities and political programmes, providing them with an ethical basis and differentiating the legitimacy of varied types of governmental aspiration. But at the technical level, operationalizing government has entailed the putting into place, both intentionally and unintentionally, of a diversity of indirect relations of regulation and persuasion that do not differentiate according to such boundaries. In particular, the capacities that have been granted to expertise – that complex amalgam of professionals, truth claims and technical procedures – provide versatile mechanisms for shaping and normalizing the 'private' enterprise, the 'private' firm, the 'private' decisions of businessmen and parents and the self-regulating capacities of 'private' selves in ways that are simply not comprehended in these philosophies of politics. Yet it is precisely these indirect means of action and intervention that are central to modern 'mentalities of government' and crucial for the possibility of modern forms of rule (MacIntyre 1981; Miller and O'Leary 1989b; Rose 1986, 1989a). The analysis of such technologies of government requires a 'microphysics of power', an attention to the complex of relays and interdependencies which enable programmes of government to act upon and intervene upon those places, persons and populations which are their concern.

It is through technologies that political rationalities and the programmes of government they articulate become capable of deployment. But this should

not be understood simply as a matter of the 'implementation' of ideal schemes in the real, still less as the extension of control from the seat of power into the minutiae of existence. By drawing attention to the technological dimension of government, we do not mean to summon up an image of a 'totally administered society'. It is true that, in certain European countries, the early versions of 'police' were inspired by the utopian dream that all regions of the social body could be penetrated, known and directed by political authorities. But, as Michel Foucault has pointed out, nineteenth-century liberalism marks the point from which this dream was abandoned in those nations that called themselves liberal democracies. The problem became, instead, one of governing a territory and a population that were independent realities with inherent processes and forces. With the emergence of such an idea of 'society', the question became 'How is government possible? That is, what is the principle of limitation that applies to governmental actions such that things will occur for the best, in conformity with the rationality of government, and without intervention' (Foucault 1986: 242).

It is for these reasons that we have suggested the need for the analysis of the 'indirect' mechanisms of rule that are of such importance in liberal democratic societies: those that have enabled, or have sought to enable *government at a distance*. In conceptualizing such indirect mechanisms by which rule is brought about, we adapt for our own ends Bruno Latour's notion of 'action at a distance' (Latour 1987b: 219 *et seq.*). He develops this notion in answering the question 'how is it possible to act on events, places and people that are unfamiliar and a long way away?' Eighteenth-century French navigators could only travel to unfamiliar regions of the East Pacific, colonize, domesticate and dominate the inhabitants from their European metropolitan bases because, in various technical ways, these distant places were 'mobilized', brought home to 'centres of calculation' in the form of maps, drawings, readings of the movements of the tides and the stars. Mobile traces that were stable enough to be moved back and forward without distortion, corruption or decay, and combinable so that they could be accumulated and calculated upon, enabled the ships to be sent out and to return, enabled a 'centre' to be formed that could 'dominate' a realm of persons and processes distant from it. This process, he suggests, is similar whether it is a question of dominating the sky, the earth or the economy: domination involves the exercise of a form of intellectual mastery made possible by those at a centre having information about persons and events distant from them.

Our notion of 'government at a distance' links this idea to a related approach developed in the work of Latour and that of Michel Callon (Callon and Latour 1981; Callon 1986; Latour 1986). In the context of analysing the establishment and generalization of scientific and technical innovations, Callon and Latour have examined the complex mechanisms through which it becomes possible to link calculations at one place with action at another, not through the direct imposition of a form of conduct by force, but through a delicate affiliation of a loose assemblage of agents and agencies into a

functioning network. This involves alliances formed not only because one agent is dependent upon another for funds, legitimacy or some other resource which can be used for persuasion or compulsion, but also because one actor comes to convince another that their problems or goals are intrinsically linked, that their interests are consonant, that each can solve their difficulties or achieve their ends by joining forces or working along the same lines. This is not so much a process of appealing to mutual interests as of what Callon and Latour term '*interessement*' – the construction of allied interests through persuasion, intrigue, calculation or rhetoric. In the process occurs what Callon and Latour refer to as 'translation', in which one actor or force is able to require or count upon a particular way of thinking and acting from another, hence assembling them together into a network not because of legal or institutional ties or dependencies, but because they have come to construe their problems in allied ways and their fate as in some way bound up with one another. Hence persons, organizations, entities and locales which remain differentiated by space, time and formal boundaries can be brought into a loose and approximate, and always mobile and indeterminate alignment.

Language, again, plays a key role in establishing these loosely aligned networks, and in enabling rule to be brought about in an indirect manner. It is, in part, through adopting shared vocabularies, theories and explanations, that loose and flexible associations may be established between agents across time and space – Departments of State, pressure groups, academics, managers, teachers, employees, parents – whilst each remains, to a greater or lesser extent, constitutionally distinct and formally independent. Each of these diverse forces can be enrolled in a governmental network to the extent that it can translate the objectives and values of others into its own terms, to the extent that the arguments of another become consonant with and provide norms for its own ambitions and actions. The language of expertise plays a key role here, its norms and values seeming compelling because of their claim to a disinterested truth, and the promise they offer of achieving desired results. Hence expertise can appeal, in one direction, to the ambitions of politicians, administrators, educators and others seeking to achieve particular objectives in the most efficacious manner, and, on the other, to those who have come to feel the need for expert guidance for their conduct in the firm, the office, the airline, the hospital or the home.

Such networks are, of course, not the simple aggregate of rationally planned technologies for shaping decisions and conduct in calculated ways (Thompson 1982). 'Governmentality' is embodied in innumerable deliberate attempts to invent, promote, install and operate mechanisms of rule that will shape the investment decisions of managers or the child care decisions of parents in accordance with programmatic aspirations. But such attempts are rarely implanted unscathed, and are seldom adjudged to have achieved what they set out to do. Whilst 'governmentality' is eternally optimistic, 'government' is a congenitally failing operation. The world of programmes is heterogeneous and rivalrous, and the solutions for one programme tend to be

the problems for another. ‘Reality’ always escapes the theories that inform programmes and the ambitions that underpin them; it is too unruly to be captured by any perfect knowledge. Technologies produce unexpected problems, are utilized for their own ends by those who are supposed to merely operate them, are hampered by underfunding, professional rivalries, and the impossibility of producing the technical conditions that would make them work – reliable statistics, efficient communication systems, clear lines of command, properly designed buildings, well framed regulations or whatever. Unplanned outcomes emerge from the intersection of one technology with another, or from the unexpected consequences of putting a technique to work. Contrariwise, techniques invented for one purpose may find their governmental role for another, and the unplanned conjunction of techniques and conditions arising from very different aspirations may allow something to work without or despite its explicit rationale. The ‘will to govern’ needs to be understood less in terms of its success than in terms of the difficulties of operationalizing it.

Governing the national economy

In the remainder of this paper, we wish to illustrate some of the mechanisms to which we have drawn attention by means of a number of examples. None of these is intended as an exhaustive historical account of policy development and implementation, let alone an evaluation of policies or the politics behind them. Our concern is with ‘governmentality’ in the sense in which we have discussed it above, with the mentalities that have constituted the changing attempts to modulate economic activity, the varying vocabularies through which economic activity has been rendered thinkable, the different problems that have concerned them, the role of intellectual technologies of theorization and inscription within them, the diversity of regulatory technologies that have been invented together with the difficulties of implanting them and the key role that has been taken by expertise. It is in the assemblage formed by this heterogeneity, and in particular in the part accorded to the self-regulating activities of ‘private’ social actors under the guidance of expertise, that the possibility has emerged for governing the economic life of the nation in ways consonant with liberal democratic ideals.

We begin with an investigation of one attempt to ‘govern’ the economy through a centralized system of economic planning. Even in consideration of such ‘centralized’ mechanisms, it is necessary to recognize that programmes for the government of economic life do not emanate from a central point – the State. The notion of government directs attention instead to the diversity of the elements out of which particular rationalities are formed, and to the mechanisms and techniques through which they are rendered operable. Whilst the rationalities and technologies do not stand in a one-to-one relationship, the relays and linkages between them are decisive conditions for

the elaboration of each. The emergence of a particular political vocabulary requires as one of its conditions of possibility the implanting of a number of mechanisms of inscription, recording and calculation. Political rationalities, even those which profess to limit the scope of government and promote autonomy and freedom of choice, require for their functioning a complex array of technologies if they are to operate.

We can illustrate the complexity of these relays and linkages between a particular political vocabulary and a range of devices for producing, tabulating and calculating information through a discussion of the development of national accounting and planning in post-war France (Fourquet 1980; Miller 1986a). National accounting is not a simple matter of mirroring the dispersed activities of individual enterprises and producers at the macro-level of the nation. Rather it is the opening up of a new domain of knowledge, involving not merely the installation of a new set of concepts by which to think of 'the economy' as an economy, but also the construction of a vast statistical apparatus through which this domain can be inscribed, tabulated, calculated and acted upon. It entails the formation of a novel relationship between government and society which makes possible distinctive forms of calculation and management of economic and social life. The process by which the national economy becomes an object of possible knowledge, calculation and possible intervention is not an unproblematic linear unfolding. The language through which the economy comes to be understood does not emerge effortlessly in the realm of an autonomous theoretical debate. And once formulated it is not a simple matter of its 'application'.

At stake in the complex process of articulating the national economy as an object to be known, recorded, calculated and operated upon is a decisive shift in the principles of government. The shift is from a notion that the ruler need do no more than extract from his or her subjects whatever wealth they may produce, to a notion that a ruler should seek to renew and even augment such wealth. This shift places the calculation of national economic resources at the heart of the objectives of government. It entails the integration of the different activities of production, consumption and investment into a table, the calculation of the proportion and movement of each of these elements, and an indication of the activities to be encouraged, the fiscal system deemed appropriate, and the correct allocation of public expenditure.

In the case of France the development of national accounting is inseparable from the project of national planning as developed under Jean Monnet. National accounting is implicated in the attempt to undertake post-war economic reconstruction, itself part of a project of political modernization designed to eliminate elements of 'backwardness' from French society. The political vocabulary through which the project to modernize French society was formulated had as its central terms the notions of 'growth', 'progress' and 'solidarity'. It was through this political language that a variety of concrete and micro-level issues were to be thought

about and acted upon. And it was by reference to this language that the categories of national accounting were articulated.

The category of production was central to this process of translating a political vocabulary into a set of techniques of recording and calculation. By means of the category of production it was possible to introduce a fundamental distinction between activities regarded as productive and those regarded as unproductive. What is production? Who is productive? Both questions lead us to the citizens for it is through them that wealth is created and it is to them that government must look if it is to enhance its resources. Whilst one can trace certain elements of such a tradition to the late seventeenth century through the writings of Petty, King and Davenant, it is in the early post-war years that such an objective was provided with a language in terms of which it could be thought, an institutional apparatus through which it could be enacted, and a set of statistical and economic-calculative techniques through which it could be rendered operable.

It was during World War II that the process of elaborating a conceptual architecture for national accounting and establishing its statistical basis commenced in France. The role of the Vichy regime in installing a statistical infrastructure which would provide an 'avalanche of numbers' was crucial in this process. After the war these developments provided a basis for the 'programming of hope' that was national planning, the attempt to deploy the language of growth and modernization in turning France 'into a truly developed country'.

To construct a set of national accounts which would enable the requirements of planning, modernization and growth to be achieved is not a simple matter of implementing a given political vocabulary. In trying to render activities and processes in a certain manner, technologies encounter various difficulties. One important component of a system of national accounts is the input-output table. Between 1952 and 1960 the French attempted to construct a table divided according to sectors (a group of enterprises defined by their principal activity; a sector can produce various products) rather than branches (the ensemble of divisions of enterprises producing one product only) of industry. It was thought that a table organized according to sectors could be immediately integrated into the accounting system since it was based on the actual loci of decisions. But despite the massive commitment of personnel and resources, and the conceptual acrobatics of those who tried to translate accounts of enterprises organized according to sectors into accounts organized according to branches, the attempt to devise a table organized around sectors ended in failure. Statistically, the notion of a table organized according to sectors made good sense. But to work with the planning commission, a table organized around branches was required (Fourquet 1980; Miller 1986a).

A degree of congruence or translatability is thus necessary between calculative technologies and the programmes they are designed to instrumentalize. Different modes of aggregating the economic activities of the

nation bring different results. One can, for instance, utilize an 'institutional' basis for aggregation (in which economic agents are grouped according to their socio-juridical characteristics – individuals, private enterprises) or a 'functional' basis (a system based on the principal activity – production, consumption, savings). The adoption of the former in the French system can be understood by reference to its utility for a system of economic forecasting. The French argued that, if the economic activities of the nation take place through agents who are physically and institutionally distinct, it made sense to construct one's accounts around these real economic agents rather than an abstract entity composed of different forces.

Programmes of government are idealized schema for the ordering of social and economic life. As such they are not simply 'applied' through techniques such as national planning and accounting. Programmes constitute a space within which the objectives of government are elaborated, and where plans to implement them are dreamed up. But the technologies which seek to operate on activities and processes produce their own difficulties, fail to function as intended, and sometimes intersect poorly with the rationalities in terms of which their role is conceived. The example of attempts at economic planning in post-war France not only illustrates the importance of the 'technological' side of intellectual labour in rendering a domain amenable to government – in particular the key role of inscription of technologies – but also shows that governing is not the 'realization' of a programmer's dream. 'The real' always insists in the form of resistance to programming; and the programmer's world is one of constant experiment, invention, failure, critique and adjustment.

In the theoretico-practical matrix of government, political programmes are inescapably associated with operational devices and critical judgements. Whilst a particular political programme sets out specific objectives for government, and proposes mechanisms to realize them, the operationalization of a programme is achieved through a complex and difficult process: formulating the categories and techniques to make it realizable; assembling and sometimes devising technologies to give effect to its objectives in the lives of individuals, enterprises and organizations; and evaluating, debating and contesting the consequences of such programmes and the conditions of their failure and success.

Governing the economy at a distance

We have argued that contemporary 'governmentality' accords a crucial role to 'action at a distance', that is to say, to mechanisms which promise to shape the economic or social conduct of diverse and institutionally distinct persons and agencies without shattering their formally distinct or 'autonomous' character. And we have suggested that vocabularies and expertise have played a very significant part in inventing and seeking to operationalize such mechanisms of government, both in the sense that they have been involved in calculated

attempts to implant such technologies, and in the sense that the existence of experts has made it possible for self-regulation to operate in a way that minimizes the need for direct political intervention. In the government of the economy, one important mechanism has operated through the transformation of the calculative procedures of economic actors. We can illustrate this through a discussion of economic regulation in the UK in the 1960s.

Conventionally, the politics of the UK from about 1962 to 1975 is seen as the high point of the interventionist State. Political arguments, from both the Conservative and Labour parties, diagnosed a failure in ‘hands off’ techniques of economic regulation, in which government did not intervene directly in economic decisions, and in which the Treasury pulled various levers in order to set the overall framework within which the various economic actors would make their calculations and decisions. This registration of failure was itself dependent in part upon the political vocabularies and techniques of inscription that we have discussed in the previous section. At the level of what we have termed ‘political rationalities’, ‘growth’ had emerged as a key indicator of the economic health of the nation, and one by which the success or failure of economic policy was to be judged (cf. Leruez 1975). There were many differences in understanding what growth was and how it was to be achieved. For example, for the Federation of British Industry and similar organizations, the imperative was for Britain to compete with other nations in the international economic order. For Labour, on the other hand, growth was to be the motor of a social dynamic for eliminating poverty and building a fair and just society. But these differences operated upon a common ground: politicians, businessmen and academics across a large swathe operated upon the *a priori* that ‘growth’ was a national goal and that new policies needed to be set in place to achieve it.

There were very specific intellectual preconditions for the emergence of a discourse of growth, and of Britain’s low ‘rate of growth’, in this particular form: growth as a calculable entity rather than a vague attribution. Systems of national accounting such as those discussed earlier had rendered national economic activity into thought as a calculable and comparable entity. International bodies such as the OECD produced tabular comparisons of the ‘rates of growth’ of the industrial nations, which could then be utilized in political arguments. Only thus could it be established that Britain’s rate of growth was low in relation to her international competitors. And only thus could the general argument that ‘something should be done’ be translated into specific programmes for realizing growth and particular technologies for operationalizing them.

The policy changes of the sixties are usually seen as a strengthening of the State’s powers of planning and regulation of economic life. Certainly, many argued that the way in which economic agents made their decisions had to be transformed if ‘growth’ was to occur. But applying the notion of government to such a period suggests it is misleading to counterpose an interventionist to a non-interventionist state. One needs to conceptualize the relations differently, to attend to the diversity of mechanisms, both direct and indirect,

through which political authorities have sought to act upon the entities and processes that make up a population in order to secure economic objectives, and the loose tie-ups between political ambitions, expert knowledge and the economic aspirations of individual firms.

Within the political vocabulary of the 1960s in the UK, the objective of economic growth was to be achieved through a number of mechanisms. Central to these were increased industrial output, improved efficiency within the enterprise, and better investment decisions. There were many initiatives through which it was hoped that this objective might be achieved, including the *National Plan*, the National Economic Development Council, the Industrial Reorganization Corporation, Regional Employment Premiums, and the legal regulation of industry through the 1965 Monopolies and Mergers Act. But whilst all these projects are indicative of an interventionist political aspiration, they are all equally constrained when it comes to intervening directly within the 'private' enterprise and at the micro-level of individual decisions. This is particularly so for interventions that would bear directly on the question of economic growth: investment decisions. It is here that a new relationship between thinking and doing was called for as a way of operationalizing the vocabulary of economic growth. It is here that a way of conceptualizing investment decisions and calculating them within the enterprise was called for to actually deliver the objective of growth through individual investment decisions. Whilst politicians and their economic advisers could not themselves control the decisions of individual enterprises, whether private or nationalized, persuading managers of the advantages of the technique of Discounted Cash Flow Analysis (DCF) held out the promise of delivering economic growth (Miller 1989).

DCF techniques were not invented in the 1960s. But it was during this period that they were actively promoted through government bodies such as the NEDC and strongly recommended by the Treasury for the Nationalized Industries (HC 440/VIII 1967; NEDC 1965). In the context of a government policy committed to some form of intervention and planning, the regulation of individual investment decisions by means of the calculus of DCF techniques made it possible to weaken the distinction between a centre which would direct the economy, and individual enterprises which would act according to instructions and inducements. DCF techniques offered the prospect that individual firms and individual managers within them would willingly transform the manner in which they thought about and calculated investment opportunities. Intuition and rule of thumb would be replaced by a new knowledge which allowed management to increase the 'productivity of capital', in particular through the concept of the time value of money. Personal judgement was to be replaced by the objectivity of economic-financial calculation which allowed management to rank investment opportunities, compare alternatives, and consider the net economic worth of particular options to the company. The widespread failure of management to objectively calculate the investment value of individual proposals would be counteracted

by economic theory, financial mathematics, economic forecasting, projection and control techniques. New teams of specialists would be needed within firms to provide this expertise. Once installed, the 'directional beam of capital productivity' would allow management to calculate and evaluate not just investment in plant and machinery, but welfare and prestige investments such as gymnasiums, country clubs and palatial office buildings. Departures from this beam were not necessarily wrong, but top management would not be able to record, calculate and evaluate the *costs* of such projects, conceptualizing them in terms of the amount of earnings foregone, thereby putting them on the same plane as other capital expenditures. The language of the productivity of capital, and the technique of DCF analysis as a way of translating this into individual investment decisions, would enable a fundamental transformation in the nature and quality of investment decisions.

It was not just for the private sector that DCF techniques were promoted as a way of delivering economic growth. DCF techniques were identified as a central mechanism for specifying more precisely the economic and financial obligations of the Nationalized Industries. With an annual investment equivalent to that of the whole of manufacturing industry, and contributing about 10 per cent of the gross domestic product, it is not surprising that the efficiency of so large a sector should be singled out for its impact on the growth of the whole economy (HC 440/VIII 1967). The 1967 White Paper stated clearly and explicitly the government's commitment to economic growth, the need for investment to secure such an objective, and the role that DCF techniques should play in ensuring that the latter was congruent with the former (Cmnd 3437 1967).

The regulatory role of DCF techniques in the context of the Nationalized Industries was of course a specific one. Free from day to day government control, yet obliged to operate 'efficiently', the criteria by which individual investment decisions were to be made within the Nationalized Industries were only specified in broad terms prior to 1967 (Cmnd 1337 1961). In such a context DCF techniques offered the possibility of installing a most appropriate regulatory mechanism. Investment decisions were henceforth to be made by the application of DCF techniques, and these were to be guided by a specified discount rate. A calculus was thus installed as the basis on which individual decisions by management should be made. In exceptional circumstances it might be legitimate to depart from this calculus. But such possible departures would be made visible by the application of DCF techniques. And in principle the investment review procedure overall was to be one of partnership between the industry, the responsible department, and the central economic department.

DCF techniques thus helped to retain the notion that individual investment decisions within the Nationalized Industries should be kept at arms length from the government. Yet at the same time a calculative norm would serve as a regulatory mechanism. Departures from the 'directional beam of capital productivity' could in this way be clearly identified as exceptions, and the loci

of these decisions shifted toward the centre. The language of 'growth' could thus be instrumentalized by a specific calculative regime within this crucial area of economic life.

Thus, whilst the language of growth was one of the central features of the political rationality of the mid-1960s, to realize such an objective at the level of individual enterprises and in the public sector was far from easy. Even a government disposed towards the regulation and supervision of industry could not take over day-to-day investment decisions within private firms or even the Nationalized Industries. The technique of DCF analysis provided an ideal mechanism for such a situation. DCF techniques made possible a range of renewed attempts to govern economic life 'at a distance'. If government could not intervene directly, it could certainly seek to act upon that group whose responsibility investment decisions were by translating their decisions and judgements into a particular form of calculative expertise. By promoting DCF techniques for private industry, by insisting on their use in the Nationalized Industries, and by recommending that they be taught to management within the new business schools, the ideal of economic growth was rendered congruent with democratic freedom, social justice and a fair standard of living. Social and private net returns on investment could be reconciled, so it was held, by transforming ways of thinking about and calculating investments. The political rationality of growth and its orientation toward the future could be rendered operable within the enterprise by a technology which made the future actually calculable. The processes of calculation would take place at the micro-level of the enterprise, but they would henceforth be congruent with national economic growth. 'Growth' as an ideal to be sought, an objective to be realized and a rationality by which to evaluate society was to be delivered in the final analysis not by politicians and planners but by a multitude of local centres of calculation. A political programme, it was hoped, could be rendered operable by installing a technology of incessant calculation.

Governing the psychological world of the enterprise

Governing involves not just the ordering of activities and processes. Governing operates through subjects. The individual manager who comes to think of investments in terms of the discounting of future cash flows is a resource for a strategy of government oriented toward economic growth. Government to that extent is a 'personal' matter, and many programmes have sought the key to their effectiveness in enrolling individuals as allies in the pursuit of political, economic and social objectives. To the extent that authoritative norms, calculative technologies and forms of evaluation can be translated into the values, decisions and judgements of citizens in their professional and personal capacities, they can function as part of the 'self-steering' mechanisms of individuals. Hence 'free' individuals and 'private' spaces can be 'ruled' without breaching their formal autonomy. To

this end, many and varied programmes have placed a high value upon the capacities of subjects, and a range of technologies have sought to act on the personal capacities of subjects – as producers, consumers, parents and citizens, organizing and orienting them in the decisions and actions that seem most ‘personal’, and that confront them in the multitude of everyday tasks entailed in managing their own existence.

Experts have played a key role here. They have elaborated the arguments that the personal capacities of individuals can be managed in order to achieve socially desirable goals – health, adjustment, profitability and the like. They have latched on to existing political concerns, suggesting that they have the capacity to ameliorate problems and achieve benefits. They have allied themselves with other powerful social authorities, in particular businessmen, translating their ‘lay’ problems into expert languages and suggesting that rational knowledges and planned techniques hold the key to success. They have problematized new aspects of existence and, in the very same moment, suggested that they can help overcome the problems that they have discovered. And they have acted as powerful translation devices between ‘authorities’ and ‘individuals’, shaping conduct not through compulsion but through the power of truth, the potency of rationality and the alluring promises of effectivity.

Again, we will take our examples from economic life, focusing here upon the internal world of the enterprise and the management of the productive subject. The government of economic life across the twentieth century has entailed a range of attempts to shape and modulate the relations that individuals have with society’s productive apparatus (Miller 1986b; Rose 1990). In the process, the activities of individuals as producers have become the object of knowledge and the target of expertise, and a complex web of relays has been formed through which the economic endeavours of politicians and businessmen have been translated into the personal capacities and aspirations of subjects.

The programmes of ‘scientific management’ that were devised in the first two decades of this century – called Taylorism after their leading proponent – are often taken as the paradigm of all ‘scientific’ attempts to make the worker an object of knowledge and an asset for management. Within Taylorism and associated techniques such as standard costing (Miller and O’Leary 1987) the worker was depicted as a brute, the motivations of the person were viewed as purely economic, and the only tactic available to management was to issue commands derived from the imperatives of the productive process. But Taylorism was not merely a cynical attempt to increase control over the workplace and maximize the rate of exploitation of the worker. Rather, it was one of a set of programmes articulated in the language of ‘efficiency’, entailing an alliance between macro-political aspirations and the powers of expertise. These programmes sought to increase the national wealth and international competitiveness of states through employing scientific knowledge and rational techniques to make the most productive use of natural, mechanical and human

resources. The labouring subject came into view as an object of knowledge and a target of intervention, as an individual to be assessed, evaluated and differentiated from others, to be governed in terms of individual differences.

The productive subject, for Taylorist programmes and the technologies that sought to implement them, was essentially a passive entity to be managed externally through a complex technology of the workplace. This entailed assembling and creating a range of practical and intellectual instruments to produce what Taylor termed the 'mechanism' of scientific management: standard tools, adjustable scaffolds; methods and implements of time study, books and records, desks for planners to work at, experiments leading to the establishment of formulae to replace the individual judgement of workmen, a differentiation of work into standard tasks, written instructions and instruction cards, bonus and premium payments, the scientific selection of the working man and many more (Thevenot 1984). This list may be heterogeneous, but as Thevenot points out, for Taylor its elements were parts of a single mechanism. Taylor here provides a perfect example of what we have termed a technology of government, an attempt to produce a stable, standard and reproducible form of relations amongst persons and things that purports to enable production to be predictably undertaken in the most efficient manner.

But Taylorism does not provide a diagram for all technical interventions to govern the productive subject through expertise. In Britain in the inter-war years, a new vocabulary and technology for programming the employment relationship was born, associated in particular with the writings of Charles Myers and the work of the National Institute of Industrial Psychology (cf. Myers 1927). This new way of construing the productive subject had its own intellectual conditions of possibility, in the 'new psychology' of instincts and adjustment that had been formulated in the years following the First World War, and in the mental hygiene movement that sought the roots of a plethora of social troubles in the minor and untreated problems of mental life that prevented efficient functioning (Rose 1985). When this new intellectual technology was applied to industry, it had three distinctive features. First, it addressed the relationship individuals have with their selves in their work. The worker came to be viewed as having a personal life that continues into his or her productive work, and that influenced the ways in which it was carried out. The worker was to be understood as an individual with a mind, with fears and anxieties. Not just monotony, fatigue, and attentiveness, but motivation and morale became a concern for various expertises of the psyche. This way of construing the psychology of the working individual was linked to a range of attempts to produce a congruence between the needs of production and the motives, fears and wants of the worker. Second, this new vocabulary brought into view the relationships that individuals have with other workers – colleagues, superiors and subordinates. The informal life of the enterprise emerged as a new terrain to be known through expert investigations and administered by expertise. Third, this language established an interdependence between the worker as a productive machine and the worker as a person

with a family and home life. Departures from specified norms in a worker's home and personal life could henceforth be seen to have possibly disruptive effects on his or her work performance. From now on, the mental hygiene of the worker would be a key concern for experts, for managers, for bosses and for politicians (Miller and Rose 1988).

At issue in this new attentiveness to the personal dimension of the productive process is more than simply a concern to increase productivity. Doubtless this is an objective that animates the history of the capitalist enterprise. Doubtless too the new promoters of mental hygiene sought to convince the bosses that their expertise would contribute to such an end. But the novel ways of understanding the relationship of the worker to the productive apparatus in the inter-war years contributed more than this. They opened up a new domain of knowledge and possible intervention. A new conception and practice of the worker emerged. This had as its objective to ensure that the bond linking the individual to the enterprise, and also the individual to society, would henceforth not be solely economic. The wage relation and the power of the boss would be supplemented by a personal bond that would attach individuals to the lives they lived in the world of work, to their co-workers and bosses, and to society as a whole (Miller 1986b). It would be possible to conceive of administering the working environment in such a way as to ensure simultaneously the contentment and health of the worker and the profitability and efficiency of the enterprise. Macro-political programmes, the quest for profit of entrepreneurs and the personal well-being of employees could be brought into alignment through a psychological expertise that was allied with none of these parties but only with the values of truth and rationality.

Within this new set of programmes and technologies of the productive subject, the subjectivity of the worker still tended to be viewed in terms of individual capacities, and judged in the negative sense of departures from norms. The worker was still to be administered externally, by a wise and prescient management informed by a rational knowledge and a neutral expertise. Following World War II a further transformation occurred in conceptions of the worker which entailed the formulation of a concern with *positive* mental health in the workplace. 'Defective' individuals still had to be identified, but a more important terrain was to be opened up – one which would seek to optimize the mental health of all individuals in their relation to their work. New alliances had been forged between industrialists, psychologists, managers and politicians in the course of managing the human problems of the war: it appeared that the enlightened administration of human relationships in work and elsewhere could maximize contentment at the same time as it maximized productivity, as well as corresponding to the values of democracy with its respect for the citizen. (e.g. Taylor 1950; Brown 1954). The responsibility for promoting the health of a society did not reside just in its medical services, but in its social practitioners – managers, politicians, teachers and others in positions of leadership. These new concerns were

articulated in terms of the expert management of human relations in groups. In the new vocabulary of group relations, the intersubjective life of the enterprise could be construed as a vital mechanism upon which government should operate, not only binding the individual psychologically into the production process, but also, through work, linking the worker into the social order as a democratic citizen with rights and responsibilities.

The new technologies of the enterprise promoted by government reports, management organizations and industrial psychologists, sought to instrumentalize its relational life for economic ends (Miller and Rose 1988). It appeared that the subjective capacities and intersubjective dynamics of employees could be shaped and utilized in such a way that would simultaneously recognize the stake of the employee in the firm and the stake of the firm in the employee. Leadership could be utilized as a resource for management, not only the leadership capacities of the top employees, but also those of crucial intermediaries such as foremen. The key to this technology was that leadership could be re-conceptualized, not as an individual quality to be obtained by careful selection procedures, but as the effectiveness of an individual in a specific role within a specific group united for a particular purpose. Hence leadership could be produced and promoted by a relational technology of the workplace, a calculated reorganization of the relations of persons and tasks.

Similarly it was argued by industrial psychologists that industrial accidents should not be understood as the result of personal attributes. 'Accident-proneness' rather should be understood as a phenomenon of the group. Accidents were to become social as well as personal events, caused by virtue of the fact that the people concerned are members of some kind of work organization. In this and other ways, the vocabulary of the group provided here a new route for understanding and operating on the personal dimension of productive activity. Productivity and efficiency were now to be understood in terms of the attitudes of workers to their work, their feelings of control over their place of work and environment, their sense of cohesion within their small working group, and their beliefs about the concern and understanding that the bosses had for their individual worth and their personal problems.

The point here is not just that a new vocabulary emerges for speaking about the tasks of management. It is that a new importance is accorded to regulating the internal psychological world of the worker through a calculated administration of the human relations of the workplace, in order to turn the personal wishes of the employee from an obstacle into an ally of economic efficiency. This would profess to overcome the centuries old opposition between work as a sphere of dull compulsion within which selfhood is denied or suppressed, and the home, family and leisure as spheres for the satisfaction of personal wants and the realization of the self. From this time forth, management would seek to recruit the self-regulating capacities of the worker, and the desires of the worker for personal goals, for its own ends. A neutral, rational and humane expertise was to assume the task of aligning the ethics of the worker as a

psychological individual whose needs were worthy of consideration with the bosses' quest for profitability.

A range of new tasks emerged to be grasped by knowledge and managed in the factory. Rendering the intersubjective world of the factory into thought as a calculable entity required more than a new theory, it entailed the invention of new devices to chart and evaluate it. Social psychologists were to enter the workplace, using such instruments as non-directed interviews to get at the thoughts, attitudes and sentiments amongst workers, foremen, supervisors and so forth which gave rise to problems, dissatisfactions and conflict (Rose 1989a; 1990). Techniques of measurement and scaling could be developed and deployed in order to render intersubjectivity into tables and charts which could give management material upon which to calculate, to diagnose the problems of the factory, to evaluate the consequences of this or that initiative. And the technology of the interview was a regulatory mechanism in its own right, for in speaking and being heard, worker's subjective states were to be transformed: frustrations dispelled, anxieties reduced, contentment increased and solidarity and commitment enhanced.

In the 1950s and 1960s, the social psychological experts of industry, and the management theorists with whom they allied, did not confine their programmatic aspirations within the factory walls. The new vocabulary of the group and its attendant technologies established a series of relays that enabled connections to be made between interventions on the interior life of the enterprise and calculations concerning the economic well-being of the nation. The notion of the proper sphere of politics and appropriate modes of intervention by the State could be transformed. A variety of programmes argued for little less than a complete reorganization of industry and the economy along social-psychological lines (e.g. Taylor 1950; Trist *et al.*, 1963; Brown and Jaques 1965; Emery and Thorsrud 1969). These programmes may have remained little more than a dream in the United Kingdom, though not in Denmark, Norway, Sweden and elsewhere. The point we wish to make concerns not their implementation, or lack of it, but rather the new relations that they make possible: expertise could secure its position by finding a way of linking the values of economic productivity, political democracy and personal contentment into a single theoretico-practical matrix.

Governing the autonomous self

The forms of political rationality that took shape in the first half of this century constituted the citizen as a social being whose powers and obligations were articulated in the language of social responsibilities and collective solidarities. The individual was to be integrated into society in the form of a citizen with social needs, in a contract in which individual and society had mutual claims and obligations. A diversity of programmes for social security, child welfare, physical and mental hygiene, universal education and even for the form and

content of popular entertainment operated within this rationale and numerous technologies were invented – from social insurance to the child guidance clinic – that sought to give effect to it.

Whilst the decade or so after the Second World War may be seen as the culmination of this period, marked by attempts to weld these diverse programmes and technologies into a coherent and centrally directed system, the past decade has seen an apparently decisive displacement of these political rationalities. Not only within the revived vocabulary of neo-liberalism, but also in many of the political programmes articulated from the centre and the left of the political field as well as from radical critics of the present, the language of freedom and autonomy has come to regulate arguments over the legitimate means and ends of political power.

No longer is citizenship construed in terms of solidarity, contentment, welfare and a sense of security established through the bonds of organizational and social life. Citizenship is to be active and individualistic rather than passive and dependent. The political subject is henceforth to be an individual whose citizenship is manifested through the free exercise of personal choice amongst a variety of options (cf. Meyer 1986). Programmes of government are to be evaluated in terms of the extent to which they enhance that choice. And the language of individual freedom, personal choice and self-fulfilment has come to underpin programmes of government articulated from across the political spectrum, from politicians and professionals, pressure groups and civil libertarians alike.

This new political language may be seen as an ephemeral phenomenon, as ideology, or as merely a reprise on the atomistic individualism characteristic of capitalism. However the perspective we have sketched out in this paper would suggest a different approach, one that emphasized the manner in which this new language served not only to articulate and legitimate a diversity of programmes for rectifying problematic areas of economic and social life, but also enabled these programmes to be translated into a range of technologies to administer individuals, groups and sectors in a way that was consonant with prevailing ethical systems and political mentalities (Rose 1989b). We can illustrate this by focusing upon one particular notion that has been so central to the doctrines of the new right in Britain, Europe and America – that of ‘enterprise’.

The language of enterprise has become so significant, we suggest, because it enables a translatability between the most general *a priori* of political thought and a range of specific programmes for administering the national economy, the internal world of the firm and a whole host of other organizations from the school to the hospital. But further, it enables such programmes to accord a new priority to the self-regulating capacities of individuals (cf. Gordon 1987). At the level of the macro-economy, the argument that an economy structured in the form of relations of exchange between discrete economic units pursuing their undertakings with confidence and energy will produce the most social goods and distribute them in the manner most advantageous to each and to all

has not spelt an end to programmes for the 'government' of economic life. Rather it has given rise to all manner of programmes for reforming economic activity in order to construct such a virtuous system, and to a plethora of new regulatory technologies that have sought to give effect to them (see Thompson 1990; Rose and Miller 1989).

Within these rationalities, new relations can be formed between the economic health of the nation and the 'private' choices of individuals. The citizen is now assigned a vital economic role in his or her activity as a consumer. To maintain the economic health of the societies of the west, construed both in terms of budgetary discipline and high levels of employment, a constant expansion in consumption is required. Economies are successful to the extent that they can promote this, at one and the same time proliferating and differentiating needs, producing products aligned to them and ensuring the purchasing capacity to enable acts of consumption to occur. However, whilst the language of the consumer, and consumer responsiveness structures political argument, providing the rationale for programmes of reform in domains as diverse as the organization of the car industry, delivery of health care and the organization of water and sewage systems, consumption is itself shaped by a differentiated range of practices and techniques whose mentalities are not those of government but of profit. This reveals the extent to which certain conditions of existence are necessary for particular political rationalities to be made operable. In this case, the rationalities of autonomy have become operable, in part, because of the emergence of a plethora of discourses and practices for shaping and regulating the conduct, choices and desires of individuals: popular television and entertainment, and particularly the transformation of the world of goods through expert techniques of product differentiation, targeting and marketing.

Thus whilst the aim of maximizing consumption may be a matter of state, the executive power operates in an indirect manner upon it, by policies on advertising, interest rates, credit and the like. The language of enterprise again forms a kind of matrix for thought here, consumers being considered as, in a sense, entrepreneurs of themselves, seeking to maximize their 'quality of life' through the artful assembly of a 'life-style' put together through the world of goods. Within this politico-ethical environment, the expertise of market research, of promotion and communication, provides the relays through which the aspirations of ministers, the ambitions of business and the dreams of consumers achieve mutual translatability. Design, marketing and image construction play a vital role in the transfiguring of goods into desires and vice versa, imbuing each commodity with a 'personal' meaning, a glow cast back upon those who purchase it, illuminating the kind of person they are, or want to become. Product innovation and consumer demand are connected through the webs of meaning through which they are related, the phantasies of efficacy and the dreams of pleasure which guide both. Through this loose assemblage of agents, calculations, techniques, images and commodities, consumer choice can be made an ally of economic growth: economic life can be governed

through the choices consumers make in their search for personally fulfilling forms of existence.

The rationalities of personal autonomy and self-fulfilment are also linked to a transformation in programmes and technologies for regulating the internal world of the enterprise (e.g. Peters and Waterman 1982; see Rose 1990). Once again, expertise plays a vital translating role, promising to align general politico-ethical principles, the goals of industry and the self-regulatory activities of individuals. The vocabulary of enterprise provides versatile tools for thought: the worker is no longer construed as a social creature seeking satisfaction of his or her need for security, solidarity and welfare, but as an individual actively seeking to shape and manage his or her own life in order to maximize its returns in terms of success and achievement. Thus the vocabulary of entrepreneurship does not merely seek to shape the way bosses calculate and activate business strategies in the external world of the market, but also can be formulated by the experts of management into a new set of techniques for ensuring business success. In these programmes, the world of the enterprise is reconceptualized as one in which productivity is to be enhanced, quality assured and innovation fostered through the active engagement of the self-fulfilling impulses of the employee from lowliest worker to highest manager, aligning personal desires with the objectives of the firm. Organizations are to get the most out of their employees, not by managing group relations to maximize contentment, or by rationalizing management to ensure efficiency, but by releasing the psychological strivings of individuals for autonomy and creativity and channelling them into the search of the firm for excellence and success. Psychological consultants to the organization provide the techniques for charting the cultural world of the enterprise in terms of its success in capitalizing upon the motivations and aspirations of its inhabitants. And these experts have invented a whole range of new technologies in order to give effect to these programmes, techniques for promoting motivation through constructing a regime of values within the firm, for reducing dependency by reorganizing management structures, for encouraging internal competitiveness by small group working, for stimulating individual entrepreneurship by new forms of staff evaluation and reward.

The 'autonomous' subjectivity of the productive individual has become a central economic resource; such programmes promise to turn autonomy into an ally of economic success and not an obstacle to be controlled and disciplined. The self-regulating capacities of individuals are to be aligned with economic objectives through the kinds of loose and indirect mechanisms that we have described earlier: the capacities of language to translate between rationalities, programmes, technologies and self-regulatory techniques, and the particular persuasive role of expertise. Significantly, these programmes do not merely seek to instrumentalize the aspirations of workers, but also seek to act upon the selves of managers. There is no opposition between the modes of self-presentation required of the manager and the ethics of the personal self, indeed becoming a better manager is to become a better self, and innumerable

training courses and seminars operate in these terms. The values of self-realization, the skills of self-presentation, self-direction and self-management are both personally seductive and economically desirable. Again, expertise plays the role of relay, teaching managers the arts of self realization that will fulfil them as individuals as well as employees. Economic success, career progress and personal development intersect in this new expertise of autonomous subjectivity.

No doubt there is a considerable discrepancy between the images portrayed in the proliferating texts written along these lines, and the reality of the practices of management. And, no doubt, the promises of this new generation of programmers of the enterprise will soon be deemed to have failed: increased productivity, improved flexibility and enhanced competitiveness will still prove elusive goals. But it is more than ideology that can be observed here. As with the previous illustrations, what is at issue here is the establishing of connections and symmetries, at both the conceptual and practical level, between political concerns about the government of the productive life of the nation, the concerns of owners of capital to maximize the economic advantages of their companies, and techniques for the governing of the subject. Expertises of the enterprise play a crucial role in linking up these distinct concerns into a functioning network. Their languages and techniques provide both the necessary distance between political authorities and organizational life, and the translatability to establish an alliance between national economic health, increased organizational effectiveness, and progressive and humanistic values.

The rapprochement of the self-actualization of the worker with the competitive advancement of the company enables an alignment between the technologies of work and technologies of subjectivity. For the entrepreneurial self, work is no longer necessarily a constraint upon the freedom of the individual to fulfil his or her potential through strivings for autonomy, creativity and responsibility. Work is an essential element in the path to self-realization. There is no longer any barrier between the economic, the psychological and the social. The government of work now passes through the psychological strivings of each and every individual for fulfilment.

Conclusion

In this paper we have suggested that Michel Foucault's concept of 'governmentality' can be usefully developed to analyse the complex and heterogeneous ways in which contemporary social authorities have sought to shape and regulate economic, social and personal activities. We have proposed an analysis of political rationalities that pays particular attention to the role of language, and the language of social science in particular. Vocabularies and theories are important not so much because of the meanings that they produce, but as intellectual technologies, ways of rendering existence thinkable and practicable, amenable to the distinctive influence of various techniques of inscription, notation and calculation.

We have sought to draw attention in particular to the programmatic character of government, and to suggest that an analysis of this programmatic field of government should not be restricted to a judgement of success or failure. We have highlighted the ways in which expert knowledges, and experts as accredited and skilled persons professing neutrality and efficacy, have mobilized, and have been mobilized within such programmes. We have argued that an analysis of modern 'governmentality' needs to free itself from a focus upon 'the state' and from a restricted conception of the kinds of mechanism through which authorities seek to regulate the activities of a differentiated assembly of social agencies and forces. Further, we have proposed that the analysis of 'governmentality' needs to be accompanied by an investigation of the 'technologies' which seek or claim to give effect to the aspirations of programmers. Our argument has been that in advanced liberal democracies such as our own, these technologies increasingly seek to act upon and instrumentalize the self-regulating propensities of individuals in order to ally them with socio-political objectives.

A range of 'new technologies' has been devised which provide citizens as economic and social actors with numerous techniques through which they can instrumentalize the diverse spheres of social life themselves in order to avoid what they have come to consider unwelcome and achieve what they have come to believe they want. In this context, the rise to prominence in the last decade of political rationalities placing emphasis upon the self-government of individuals, and seeking to limit the incidence of 'the state' upon the lives and decisions of individuals, can be seen as one articulation, at the level of a political rationality, of the new possibilities for political rule which these technologies have established. Political authorities no longer seek to govern by instructing individuals in all spheres of their existence, from the most intimate to the most public. Individuals themselves, as workers, managers and members of families can be mobilized in alliance with political objectives, in order to deliver economic growth, successful enterprise and optimum personal happiness. Programmes of government can utilize and rely upon a complex net of technologies – in management, in marketing, in advertising, in instructional talks on the mass media of communication – for educating citizens in techniques for governing themselves. Modern political power does not take the form of the domination of subjectivity (Miller 1987). Rather, political power has come to depend upon a web of technologies for fabricating and maintaining self-government.

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Note

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