

Bureaucracy and Scientific Management

No morality can be founded on authority, even if that authority were divine.

A.J. Ayer

The basis of what I will say in this book is the reading, writing, thinking, talking and listening about organizations that I have done, originally as an undergraduate student of politics and subsequently as a PhD student and academic in the area of organization theory. I keep coming back to the iconic figure in early organization theory, the German sociologist Max Weber (1864–1920). I mention his dates because Weber seems to me very much a man of a particular time. A man of whom it has been said (as it has of others) that he was the last person to know everything of importance that was to be known. A nonsensical idea, of course, but one which points to the extraordinary breadth of his interests in sociology, religion, economics, politics, history, music and much else besides. Nowadays, in common with other academics, organizational theorists restrict themselves to a much narrower canvas and this I think gives organization theory a peculiarly detached feeling. For myself, I don't know where the boundary might be between organization, public administration and political philosophy; or between organization, society, family and individual psychology.

And so I like Max Weber for his breadth and also even for his name, which seems agreeably weighty, Mittel European, *fin de siècle*, whilst also having the kind of panache that might make it a suitable name for a twenty-first century architect or fashion designer. I picture Weber as heavy, bearded, slightly pompous – given to monologues and pronouncements of the sort that might begin: 'to understand this question we must in fact analyse it under five headings ...'. I have no idea if this is an accurate picture of Weber (although it's true to say that he did have a beard).

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Weber saw that what might hold a society together was some sense of authority – that people somehow submitted to the will of others because they believed those others had the right to give the orders. For sure we could envisage a society just held together by brute force, and maybe much of social organization has this as its origin and, permanently, its background. That brute force – call it coercion, call it power – isn't quite the same as authority, though, which connotes people going along with the will of others through consent given on some basis other than just fear. It's a distinction (probed and criticized by many authors) which runs through thinking about organizations.

Some societies or organizations get held together by the charisma of their leaders: the reason why their will is obeyed is because of their characteristic ability to inspire the devotion and obedience of others. There must be a complex psychology here – bred as much by the followers' desires as the leader's charisma – and most candidates for charismatic authority seem peculiar in both good and bad ways. Jesus of Nazareth and Adolf Hitler might be the two poles. Then again, authority might come from tradition: you obey because that's just the way things are and have always been. The authority of the medieval Church and Royal houses seem like good examples. We can't fully separate out power, charisma and tradition. Inspiring leaders often owe part of their charisma to a propensity to violence; the descendants of such leaders may become imbued with an authority which is purely traditional and, anyway, still backed up with force.

According to Weber, these forms of authority were being increasingly supplanted by something different: rational-legal authority. Here obedience was secured through a kind of due process: formal, logical, reasoned.¹ Perhaps the key point is that it is not arbitrary – the whims of leaders – but comes from a system. Laws are decided, codified and applied to all citizens. Within organizations, this authority takes the form of rules, procedures and duties. Thus the authority vested in, say, a Chief Executive is of a particular sort. First it comes from the job itself, not the person. We obey (if we do) the Chief Executive because s/he holds that job and not (or not primarily) because of the person's charisma or membership of a particular family. When a new person takes on that role,

¹ It still had force in the background, of course: disobey the law and coercion follows.

the authority transfers to them. And the role places a limit on what kinds of obedience can be called for. Again, it is not arbitrary. As an academic I can legitimately ask a student to write an essay but not to clean my shoes.

The kind of organization which emerges from the complete application of the rational-legal principle is one which is entirely defined by rules and a series of hierarchical relationships – a bureaucracy. People's jobs were defined: you did the book-keeping but didn't clean the toilets. Then they were refined: you cleaned the toilets on the first floor, someone else did the second floor. And the more the organization grew, the more refined were the jobs. Then again, you didn't do the jobs any old how. What was important was to do them in a way established for you by rules. That way, it was possible to be certain that the job was being done in the most efficient manner. In this sense, rational-legal organization entails the removal of discretion – i.e. judgment or choice – from work. You worked under orders from those above you in the hierarchy and reported to them. The removal of discretion and the fact that authority comes from the role and not the person means that another kind of arbitrariness disappears as well: appointment to a job and promotion were based strictly on experience and qualifications.

Although in many ways not a bureaucracy, something of this process can be seen when, for example, a group of students share a house. Often they will draw up a rota defining who will do chores like cleaning and cooking (all too often a document which experience shows to have been hopelessly optimistic). It defines responsibilities and it is usually animated by some notion of fairness, such that the work is shared equally. It may also be attentive to the particular skills that individuals have (for example, ability to cook). As I say, this isn't a bureaucracy but it shows how even a very simple organization can make use of principles of systemization, division of labour and authority. We would think it odd and, a key point, *illegitimate* if household chores were allocated on the basis of physical coercion by the strongest person.

Weber was by no means a partisan for the emergence of rational-legal or bureaucratic organizations. On the contrary, he seems to have been alarmed by their rapid spread through the state, business and institutions to the point where he feared that the world was becoming enclosed in an 'iron cage' of rationalization. But why were they becoming dominant? Because, says Weber, they represent the most technically efficient and rational form of organization.

 what is rationality?

This proposition, its meaning and difficulties seem to me to be defining of a whole set of issues which have resonated through both organization theory and practice ever since. It might almost be said that there is a fault line on organization theory which doesn't just stem from, but runs through, Max Weber. The crucial issue is what it means to be rational. That is a big question and I am not a philosopher (and, in any case, philosophers do not agree on the answer). Roughly speaking, one of the key shifts in human history was that period, around the last half of the eighteenth century, when Enlightenment philosophy emerges, along with empirical science and industrial production. That philosophy was committed to secular rather than religious explanation and the idea that the application of reason rather than tradition or dogma would not only better explain the world but also allow its improvement. In one way, this was extraordinarily emancipating. The philosopher Immanuel Kant, in his 1784 essay 'What is Enlightenment?' (in Reiss, 1991), says that enlightenment lies in daring to know, in having the courage to use one's own reason rather than rely upon the authority of others. This could be said to be *the* foundational text of modern thought.

Yet the rationality envisaged by bureaucracy seems to be the exact opposite of this, for it is precisely the use of one's own reason which is prohibited when the capacity for discretion is removed. Take away arbitrary conduct (which presumably includes both rational and irrational conduct) and you also take away the capacity for the individual use of reason. The rationality of bureaucracy resides in the system of rules, not in the judgment of individuals, except those, usually high up in the organization, who make the rules, and who do retain discretion to some degree. And so from its inception, bureaucracy sets up a dichotomy of systemic and individual rationality.

Max Weber identified another kind of dichotomy. Bureaucracies are rational in one particular sense of the word – formal or instrumental rationality. The idea here is that the means adopted to achieve a particular end are the most efficient for that purpose. This might mean that they minimize wastage and maximize production. And so, although bureaucracy nowadays connotes inefficiency and red tape, its Weberian form suggests otherwise. Yes there are rules, but these are the price to pay for avoiding the calamities that come from not following the rules. Interestingly, current-day attempts to reduce bureaucracy so as to foster innovation frequently run into appalling

disasters when, freed from rule-following, organizations take risks which do not come off. Flexibility, too, has its price tag. For Weber, the bureaucracy with its machine-like operation, its complete harmony of individual actions untainted by discretion, could routinely outperform any other kind of organization. Small wonder that it was taking over the world.

Weber's other kind of rationality was substantive or value rationality. Here the question was whether the ends of action were in and of themselves rational. Thus, suppose that I decide to murder someone at random. This is substantively irrational – the end or purpose is irrational, the act of a madman. But if I do so with a swift karate blow to the heart, this is formally rational (it is the most efficient means) despite being substantively irrational. Whereas if I proceed by slapping my victim with a wet fish for several days, then this is neither formally nor substantively rational. Bureaucracies are formally rational but they don't do substantively rational. That does not mean that they are *never* substantively rational, but it does mean that they may not be. They simply don't consider that domain of rationality because they are not concerned with ends, only with means.

My murder example sounds like a silly one, but it has a horrifying real-world counterpart in the Nazi Holocaust. According to Zygmunt Bauman's extraordinary book *Modernity and the Holocaust* (1989), the genocide instigated by the Nazis represents the extreme application of a bureaucratic logic. For what makes the Holocaust so peculiarly appalling is the way in which it was conducted industrially – with a system of rules, impersonally applied, which made it as technically efficient as genocide could be. The capacity to register and monitor populations so that Jews, Communists, gypsies, homosexuals and the other categories to which the Nazis were so implacably opposed was itself a considerable administrative achievement. The shipping of these people to the camps was another, and their systematic extermination a third. One of my favourite authors, the novelist C.P. Snow, has one of his characters, a wartime civil servant in London, reflect that, just as he was handling the memoranda relating to the development of atomic weapons, so his counterpart in Berlin would be reviewing figures on the death rate of Jewish people under different dietary regimes (this was written before the extermination programme was known about). Bureaucratic practice, the impersonal, scientific, ethically neutral pursuit of means made the Holocaust formally rational whilst, clearly, not being substantively rational. Bauman says that we

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should not, therefore, see the Holocaust as an aberration or anomaly when compared with mainstream western culture: rather, it was a manifestation of the habitual ways of organizing within that culture. For sure this is an extreme case, but its logic is very common and is found whenever we detach ends from means – and if it is a case that seems extreme and remote now, remember that it was very real indeed as recently as our parents' and grandparents' generation.

Once we move from the extreme cases, life gets more difficult. For who is to say what is substantively rational? It is a question of values and, whereas there are some values which are so widely shared as to approach universality (so that we can agree about the Holocaust), there are far more cases where there is little or no agreement. This was perhaps not as difficult for Weber as it is for us today. Weber, who had inherited the Enlightenment tradition of Kant, would have hoped that ethics could itself be made the subject of rational judgment. Whereas religions addressed ethics through the authority of tradition, backed up by the not inconsiderable weight of the will of God, post-Enlightenment societies have had to make do with a secularly derived ethics. For Kant, this would be to say that it would be irrational to act in a way which you would not wish to be the way that people generally acted. In other words – do as you would be done by. This still has its appeal, but it (and other attempts at a rational basis for ethics) has real limitations. In particular, people may have quite different views about how they themselves would like to be treated.² One of the defining features of contemporary society seems to be a fragmentation of ethics. So substantive rationality turns out to mean a social consensus about values and that consensus does not, to any great extent, exist. We may overwhelmingly agree that that genocide is wrong; we don't agree about abortion or euthanasia.

Anyway, all this aside, the fundamental point is that bureaucracies don't care about substantive rationality, they don't care about ethics, they are just about getting the job done as quickly as possible. That

2 In a high-profile case in Germany a few years ago, a man willingly volunteered to be killed and eaten, and even shared the first course – his severed penis, fried – with the man who went on to kill him. I think we are on safe ground in saying that most people would consider this bizarre, and it does show the limitations of this approach to ethics.

doesn't mean that they couldn't, in fact, be doing an ethically good job (for example, a charity). They could; just as easily as they could be doing an ethically poor one. It's just that this would be irrelevant, either way, to bureaucratic logic. But is this true? One of the most interesting recent books on organizations, Paul du Gay's *In Praise of Bureaucracy* (2000), argues otherwise. Amongst many other points, he says that formally rational bureaucracies do embody a specific and very important ethic. In rejecting patronage and promoting impersonality, bureaucracies are about *fairness*. Being employed or promoted does not depend upon whether you went to the same school as the boss, or the colour of your skin, or whether you agree to sleep with your manager. The service you receive as a client or customer is not conditioned by the mood or prejudice of the person giving the service, or any other value judgments.

This is an extremely important argument. In some ways it is the inversion of one which has long been made as a critique of science. At least one version of social science (positivism, mentioned in the introduction to this book) is that it is concerned not with values but with facts. It is neutral. This is another idea going back to the Enlightenment, when the philosopher David Hume proposed that facts and values could be differentiated so that one kind of statement (for example, water freezes at zero centigrade under standard pressure conditions) is a ('positive') fact, whereas another kind of statement (for example, stealing is wrong) is a value judgment (or 'normative' statement). The former are provable, the latter are not. This seems like another version of the formal/substantive rationality split. Science, like formal rationality, is neutral. Substantive rationality is about values. A standard critique of the view that science is value-free is that the idea of value-freedom as desirable is *itself* a value. Yet science has no way of justifying this value. But whereas the *critique* of positivist science is 'so it does have values', du Gay's *defence* of formal rationality is '*but* it does have values'.

I think du Gay is right in what he says. My only caveat would be that he is only right in relation to what Weber called ideal-type bureaucracies. An ideal-type is the fullest, purest, most complete version of an idea, concept or practice. It doesn't mean that Weber thought that bureaucracies were an ideal to be strived for – as I mentioned earlier he worried about them. But in the pure bureaucracy, there is, as Paul du Gay says, an ethic of fairness. The problem is that actual bureaucracies do not necessarily – and, moreover, often do not – embody this ethic.

bureaucratic dysfunctionalism

To understand this, I find it helpful to think about a set of classic studies of bureaucracy, sometimes called the ‘bureaucratic dysfunctionalist’ literature. One of my many objections to organization theory at the present time is its perverse belief that anything published before, say, 1990 – if that – is boring, old hat and that it is somehow shameful to consider it. The fact that many of today’s groundbreaking studies do no more than palely repeat earlier work is, of course, no more than a reflection of my old age (I was 39 as I wrote these words). The fact that I have a suspicion that many of the earlier studies were based upon more serious programmes of empirical investigation and thought is similarly antediluvian. But enough of that hobby horse.

The bureaucratic dysfunctionists suggest that bureaucracies in practice have not just the problem of a deficit of substantive rationality but, even, a deficit of formal rationality. Crozier’s (1964) study of French bureaucracy shows how, contrary to du Gay, bureaucrats continue to indulge their own prejudices and preferences in their conduct. They were no more ideal-type than Melville Dalton’s *Men who Manage* (1959) who managed to find considerations of gender, race, religion and suburb relevant to their decision making. Two decades later, Rosabeth Moss Kanter, before she became a management guru, found that managers in a bureaucracy liked to appoint those who shared their own background, gender and education (Kanter, 1977), and this ‘homosociality’ of recruitment continues to occur in many contemporary organizations despite attempts at equal opportunity and diversity initiatives.

To continue, Gouldner’s (1954) investigation of a gypsum mine revealed the presence of ‘mock bureaucracy’, where an impressive array of rules and regulations, the hallmark of formal rationality, existed. The only problem was that they were ignored. It’s common (and this was one of Gouldner’s examples) to have safety regulations that staff don’t, in fact, respect. A friend and colleague of mine once researched equal opportunities for women in organizations. ‘All taken care of’, he was told, ‘We have a policy’ – and a large manual of equal opportunities procedures was proudly displayed. But, my colleague asked, were there equal opportunities for women? Procedures and practices aren’t necessarily the same thing.

This idea, that there might be a disjuncture between the formal rules of a bureaucracy and what actually happens, is given an elegant

twist in the work of Blau (1955). He noted that one of the most potent weapons in the arsenal of trade unions is the 'work to rule'. Here, workers agree only to follow the letter of what they are obliged to do by contract and job description. Why? To disrupt the organization in pursuit of a union aim, perhaps a pay raise. Yet if *not* following the rules is disruptive, it cannot be the case that following the rules does indeed produce the most efficient of outcomes. There is a gap between the rules and what people actually do that contributes to efficiency and, therefore, formal rules and efficiency are not identical.

Perhaps the 'daddy' of bureaucratic dysfunctionality is Merton's (1940) argument about 'goal displacement'. Bureaucracies have an inbuilt tendency, because they focus on means and not ends, to degenerate into a situation where the means becomes an end in itself. In other words, following the rule becomes the point, not the point of the rule. Suppose a security guard is taking care of a factory. He (let us assume it is a man) is told to follow a rule, and the rule is that no one is to be admitted without a pass. The purpose or end of the rule is to protect the factory. The means is the security guard checking passes. One fine day the Managing Director arrives early for a meeting. The factory is in trouble and the MD is meeting with creditors. But she (let us assume it is a woman) has not brought her pass. The security guard recognizes the MD, of course, but will not let her enter without a pass. Rules, he says, are rules. So the MD fails to make the meeting and the factory closes down. The security guard's goal or end (protecting the factory) has been displaced, so that the means (checking passes) has become an end in itself. Thus formal rationality swallows up substantive rationality, and systemic rationality overwhelms individual rationality.

formal and informal; intended and unintended

All of these examples and arguments serve to point up two interesting things. Both of them seem to me to be central to understanding anything much about organizations. The first is that there is a disjuncture between the formal and the informal organization. The formal organization of rules, procedures, what is 'meant to' happen, is not the same as the organization itself. The organization itself includes – and in some senses it *is* – what actually happens. This could mean that bureaucracy is less efficient than Weber anticipated and less ethical than du Gay hopes. It means that alongside impersonal rules and procedures we have to consider highly personal prejudices, motivations and actions.

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It means something else, too. Bureaucracy has been criticized for dehumanizing people. It is not hard to see why. In the ideal-type, people are no more than parts in a well-oiled machine – devoid of passion, prejudice and personality. Devoid, in a sense, of agency – the capacity to make choices and act. Yet, for good or ill, this is not so once we recognize the informal aspect of organization. Instead, the recalcitrant or complaining, lazy or hardworking, laughing or frowning, pretty or ugly, trusting or cynical *person* comes back into focus. I will say much more about this later, but for now I will just make one caveat. The formal and informal organization are not unrelated, independent spheres; they are interdependent and mutually constitutive; one could not exist without the other, and the precise nature in any particular case of the one will influence the other.

Then there is a second implication, especially arising from goal displacement. What is done in organizations – for example, establishing rules – will always carry with it the possibility, and, in fact, near certainty, of having both intended and unintended consequences. This idea is a very powerful one. It suggests that whenever people act towards some purpose, the outcomes will be a mixture of what was hoped for by the action and what was unforeseen and possibly undesired. Think of a situation where there are disruptions to petrol supplies. An individual with, perhaps, a half tank of petrol may think it sensible to fill up. But many other individuals make the same (rational) decision. Result? Huge queues at petrol stations, which run out, which causes more disruption to supply and more panic buying and so on. This is an unintended consequence of individual action.

Unintended consequences are perhaps most important when we think about management (and, as I said in the Introduction, that currently is the context in which organizations are most often studied). They mean that the capacity of managers to get things done is often confounded and, moreover, that much of management consists of dealing with the unintended consequences of previous actions. But, since that ‘dealing with’ will itself give rise to further unintended consequences, this means that management – and organization generally – is perennially failing in the sense that its ends are never finally achieved. Such a prospect means that, other issues aside, the idea of a bureaucratic organization – or any other kind of organization – being simply about the establishment of appropriate means to reach given ends is fundamentally, irredeemably and irrevocably flawed.

These claims run so counter both to the social image of the manager and to what is taught in most management schools (see Chapter 6) that I should elaborate a little more on unintended consequences.

Why do they arise? At least one part of this has already been prefigured. The fact that people have some degree of agency means that it is open to them to ignore, resist, circumvent or just plain misunderstand; all of which will make the best-laid management plans go awry. There has long been a debate in the social sciences about the nature and extent of agency.³ The so-called structure-agency or structure-action dualism has as its two poles the propositions that social structures effectively determine what happens, and people have little, or no, individual effect or, on the agency side, that all we have is individuals making choices, and social structure is just the aggregate of these. So, for example, debate about crime often polarizes between those who say that crime levels are effectively determined by the extent of poverty, unemployment and social deprivation (structure) and those who see it entirely in terms of individual decisions as to whether or not to commit a crime (agency). Another example would be how we understand the experience of a woman who feels unfulfilled and unvalued because she undertakes childcare rather than paid employment. Is she to be understood as having a personal problem of poor self-image (perhaps addressable through counselling) or a social problem about expectations of women's roles (perhaps addressable through political action)?

Whilst, both in social sciences and everyday life, analysis is polarized between structure and agency, much social theory in the last few decades has, in various different ways, suggested that it is a false dichotomy.

Structure-agency is not an either/or but a both/and. Anthony Giddens (1984), for example, has proposed a duality of structure and action so that action reproduces structure whilst structure conditions and shapes action. The classic example is language. To speak a language in a way that others understand means following the existing rules, or structure, of language that existed before we were born and which we must learn and adhere to. Yet, at the same time, a language only exists because individuals speak it and, as a matter of fact, they constantly adopt new words, slang and ways of speaking, which is why language changes over time. In this sense, language users are agents or actors but they both exist within, and enact, the structures of the language they speak.

3 A more challenging issue in relation to agency is the argument that the very idea – usually, of a choosing individual – is itself one specific to modern, especially western cultures. I buy the argument that agency is socially constructed but, given that it is so constructed, its effects are the same as if it were an essential property of human beings.

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Thus, in an organization, what people do is certainly conditioned by the rules, procedures and norms prevailing, but these only continue to exist, and develop, because of the actions, choices and behaviours of individuals. Students sit in a lecture hall, following the social rules or structure that determine that they should be there and behave in a certain way and their lecturer similarly follows rules. But in choosing to do this, students and lecturer alike 'reproduce' the social rules or structure through their choice or agency. This seems to me a sensible approach, and it means that agency can never be written out of organizations and so the perfect machine-like organization is a myth. We cannot necessarily predict what people will do.

And there is more to the issue of prediction than simply the question of people's individuality. The added complexity is that people will behave differently precisely because of the predictions which are made about them. This is one of the principle reasons why there is a disjuncture between social and natural sciences (a disjuncture denied by positivists). If I make a prediction about the behaviour of a natural object, it may or may not come true, depending upon how well-founded my scientific theories are: but the outcome will not be affected by the fact of my having made a prediction.⁴ But consider something like the housing market. I am thinking of selling my house but want to wait until prices have reached their highest. I read in the paper that prices are set to peak and so put my house on the market. But so do many other people. The result is that there is an increase in supply and prices begin to fall. The prediction has been self-fulfilling. Or suppose I read that prices have peaked and are now falling. I hold off selling my house and so do others. The result is a decrease of supply and prices begin to rise. The prediction has been confounded.⁵ There is, in the social world, no way of separating out our theories and predictions about the world from what happens in the world. This is one of the reasons why the predictions of economists, upon which government budgeting is based, so often turn out wrong.

What applies to the social world in general is also true in organizations. Suppose I hear that a new chief executive is being appointed who

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- 4 It is worth saying that in the higher reaches of physics there is reason to think that predictions can affect the physical behaviour of objects – but in the everyday range of experience this is not so.
 - 5 This is also another example of unintended consequences, but of a particular sort as it arises from actions in response to predictions.

has a reputation for sacking people. I might decide to look for a new job and leave before I am fired. I might decide to work very hard in the hope that the axe will fall elsewhere. I might decide to work less hard as I think I am likely to lose my job anyway. Predictions about the future change conduct and therefore affect just what happens in the future. In a similar way, assumptions about people can have strange effects. I will talk more about this later, but, for now, consider the case of a manager who assumes that the workforce is motivated by money. Accordingly, a pay system is devised with, for example, bonuses for good performance. In these circumstances the assumption is likely to be self-fulfilling in that the workforce, offered only the motivation of money, will be motivated only by money. Their commitment to the quality of work or the company itself will be limited or non-existent.

An important factor implicit in all this is that organizations, like life in general, take place in time. We cannot imagine an equilibrium point. Continuing my previous example, suppose in response to a materialistic workforce a new human resource manager is appointed. She thinks the answer is to give the workforce more freedom and responsibility. Some of them, used to the previous style, respond by taking advantage of this to slack off. In the meantime, others leave and are replaced by people who have only known the new system. But by now the slackers are a problem and the manager tightens up. The new workers are now resentful. But anyhow, by now the company has been taken over and a new management system is being introduced – and so it continues. There is no one point at which a supposedly optimum system of organization can be reached and, again, this means that the solutions to problems at any one time form the basis of new problems in the future. This dynamic, temporal character of organizations is again a reason for plans being confounded and unintended consequences arising. In this sense, rather than thinking about organizations as fixed entities, it might be better to think of them as current manifestations of an ongoing process of *organizing*.

These kinds of issues – agency, unpredictability, goal displacement and, overall, unintended consequences – are the irreducible core of organization. They are not anomalies. For example, in the British education system, attempts are made to set targets for attainment. It might be that schools should achieve a 25 per cent target for A–C grades in GCSE. The purpose is to ensure that all pupils, not just the highest achievers, are catered for. But consider the school at 23 per cent. There the teacher's best hope of reaching the target is to concentrate effort on the 2 per cent of the class falling just outside the target

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and to neglect everyone else (see Gewirtz, 2002, for detail). So wider educational attainment has been lost in pursuit of a specific target. Or, in the NHS, attempts to shorten waiting lists by introducing target times have been confounded by hospitals creating waiting lists for waiting lists and thereby meeting the target. These are all recognizable cases of unintended consequences, goal displacement and the over-run of substantive rationality by formal rationality. Yet the irony is that these effects are then treated as a new problem, demanding new targets, new measures, new ways of organizing, which then go on to create their own unintended consequences. It is in this sense that organizations and management are perennially failing.

so what?

I suppose that there is a big 'so what?' to all of this. After all, if this is true, what are we to do? Just give up trying to organize? That seems tricky if organization is in some way endemic to human culture. Perhaps we just have to accept unintended consequences and get on with it if there is no alternative. I don't have any straightforward answers to this but, at the very least, I think that simply to recognize the issues takes us a long way forward. First off, it might call for a degree of humility from, in particular, managers and politicians. Too often they act as if they can deliver perfect solutions. Relatedly, it suggests the need for a degree of care. Unintended consequences may always be with us, but some are more foreseeable than others. Confronted with a problem, managers often too quickly and too confidently announce that the answer is simple: a reorganization; a new inventory system; a new accounting system; a new reward system. This is a conceit often fed by management consultants, gurus and business schools. Encountering a call for more deliberation, the response will typically be that there is no time to do so – but this is surely irresponsible, and to some large extent the busy-ness of managers is simply self-perpetuating, for in a sense it accelerates time. Additionally, and related to time, one feature of managerial careers is that people have often moved jobs before the unintended consequences they have created become manifest. This in itself is a recipe for irresponsibility (one might say it is an unintended consequence of the design of managerial careers).

However, there are much wider implications for what I have tried to say so far in this chapter. Ultimately, we cannot conceive of a form

of organization and management in which means are detached from ends (and I mean here both goals and effects, both intended and unintended). For this is to detach organization from ethics and values. In the Introduction to this book I said that my approach to organization theory is in some ways 'anti-management', and the ultimate reason for this is that it seems to me that much or most writing on organizations and management does purport to detach means from ends and does ignore, or significantly truncate, attention to ethics and values. I want now to elaborate that thought a bit more, this time by talking about some of the origins of management thought and practice, origins which have left an enduring legacy to the present day.

taylorism and scientific management

To do this, I will introduce another of the iconic figures from organization theory, from a similar time to Max Weber, but a man of a very different stamp: Frederick Winslow Taylor. Taylor (1856–1917) was no theorist, he was an engineer working in one of the toughest of industries (iron and steelmaking) during one of the most remarkable periods of technical and managerial innovation the world has seen: the industrialization of the United States following the American Civil War. In one way, it was remarkable that Taylor was doing this job at all. Born into a wealthy Philadelphia family, he seemed destined for a career in the law when he took the unusual decision to go into the steel business, initially as an apprentice. His childhood had been rigidly controlled, with all his activities – sport, walking, sleeping position and country dancing – minutely analysed and prescribed (Fineman, 1996: 545).

This might lead us to understand his life's work in primarily psychological terms, but this would be mistaken to the extent that it was also historically rooted (structure and agency again). For one thing that is worth saying at the outset is that a great many other people, many of them engineers, were developing similar ideas to Taylor at a similar time in a similar place. But it is Taylor's name that has become inseparable from this general movement, usually known as 'scientific management'. By recognizing that this *was* a general movement, it is possible to see that it reflected a particular set of problems, assumptions and attitudes; it did not emerge by chance, and its context is really quite important.

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Pennsylvania in and around the 1870s was a revolutionary place.⁶ Its smokestacks bore testament to industry on a scale and pace that had never been seen before, even in the English Industrial Revolution. It is almost no exaggeration to say that it was out of this cockpit that management, and a good part of what has defined human society since, at least in the West, emerged. It did so in a form which gave management what Yehouda Shenhav (1999), in one of the finest historical studies of the subject, has called its engineering legacy. It is no coincidence (as I will discuss in Chapter 6) that it was also in Pennsylvania that the world's first business school, Wharton, was founded in 1881, nor that Joseph Wharton was both the founder of that school and the owner of one of Taylor's workplaces.

The steel industry (and others) was in large part the creation of immigrants and in ways which had an interesting pattern, right from the beginning. The mill owners and many of the engineers were often from Scottish families and were often (like Taylor) Protestant or Nonconformist in religion. Weber knew all about Taylor, and regarded his work as emblematic of the advance of rationalized organization. And Weber had also advanced the thesis that Protestantism, with its values of thrift, hard work and individualism, had a peculiar affinity with the development of capitalism. The US steel industry bore this out. The workers in the mills, however, typically had a different background. In the early years, they were more likely to be Irish emigrants and to be Catholics. Later, they came from all parts of Europe and spoke a babel of languages. It is no small part of the context of scientific management that it emerged as an artefact to the relationship between Protestants and Catholics and English and non-English speakers: it is overlaid by cultural and racial assumptions. It's also worth saying that steel was an overwhelmingly male, and even macho, industry, and this too left its mark on management.

Taylor (I'll cease from now on to remember others doing the same thing) identified a problem based on his early experience as a machine operator. He was working in some of the biggest of the iron and steel plants, at Midvale and Bethlehem (this was the one owned by Joseph Wharton) in Pennsylvania, and his problem was one which is familiar to anyone who, like me, knows nothing about cars. When I go to the garage to have my car fixed, the mechanic may say to me – sucking in

6 Its modern-day equivalents might be the massively growing heavy industry of China or the call centres of India. Such locations exhibit many of the techniques developed by Taylor but they also share the sense of being places where the world is being re-made.

air through his⁷ teeth – that I have a serious problem, that it will take several days to fix, and that it will cost me a large amount of money. I have no way of knowing if this is true. I don't know what the fault is, I don't know if it could be fixed more quickly, I don't know what parts will be needed. What I do about all this will in large part depend upon the extent to which I trust the mechanic.

Taylor's problem was similar. He was working in an industry where it was normal for workers to organize their own work. Work gangs hired their own crew, worked at their own pace, used their own tools and, crucially, knew far more about the work than did their supervisors. Work was assigned and done on a rule of thumb or 'guesstimate' basis. Taylor reckoned that workers tended to, as he called it, 'soldier'; he meant that they slacked off, either because of 'natural soldiering' – they were naturally lazy and would work as little as they could – or 'systematic soldiering' – they would deliberately restrict output so as to keep their jobs and maximize staff levels for themselves and their friends. It's noticeable that this implies that Taylor didn't trust the workers much, and here the cultural context is important: it reflects in part the stereotypical attitude of work ethic Puritans towards the supposedly feckless and dishonest Catholics.

The solution lay in scientific management, which Taylor articulated in many different ways but most famously in his four principles, familiar no doubt to every student of management and organizations:

- A science of each element of work.
- Scientific selection and training of workers.
- Division of labour between workers and managers.
- Co-operation between managers and workers.

In practice what the first of these meant was time and motion (T&M) studies. T&M meant managers using a stopwatch and standing over a worker to measure what the time taken for each tiny component of the job being done. Imagine the act of drinking a glass of beer:

Start position: Standing at bar

Movement 1: Hand to glass (2 seconds)

Movement 2: Grip glass (0.5 seconds)

Movement 3: Lift to horizontal (1 second)

7 Yes, I know. But most mechanics are male, aren't they?

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- Movement 4: Lift to lips (1 second)
- Movement 5: Swallow 0.05 litres beer (2 seconds)
- Movement 6: Move arm to horizontal (1 second)
- Movement 7: Move glass to bar (1 second)
- Movement 8: Release grip on glass (0.5 seconds)
- Movement 9: Belch (1 second)
- End position: Standing at bar
- Total time for operation: 10 seconds

In practice, of course, it would be an industrial process operation but the principle is the same. It establishes the optimum time for the operation with no wastage (from the point of view of the operation itself) with other activities: no pausing to smile, or pick up a cigarette, or pop to the loo or eye-up the person next to you at the bar. It is easy to see why this technique attracted Weber's attention, for it is an exemplar of formal rationality.

Having established the time for each motion in the process, it becomes possible to set benchmarks. If one operation can be completed in 10 seconds then 6 can be done in a minute, 360 in an hour and 2,880 in an eight-hour shift. And a pay rate for the shift could be set, with a bonus for exceeding it and a pay cut for failing to reach it. Of course, in the beer drinking example, or in an industrial process, you might say that the rate that the operation can be done might decrease over time. But this was no problem for scientific management: it measured, and factored in, fatigue time.

At a stroke, this system solved the soldiering problem by effecting a very fundamental redistribution of power. No longer was it possible for workers to give unrealistic estimates of the time needed to perform a task. How long will it take to drink half a litre of beer? 100 seconds – no more and no less. The manager with the stopwatch now has the power, not the person performing the task.

I have chosen the example of beer drinking as an illustration because we would normally think of something like having a drink as an unregulated activity over which we ourselves have choice, and this was more or less how industrial work was, pre-Taylorism.⁸ The impact, or more accurately the intention, of Taylorism and scientific management was to evacuate all discretion from work processes so

8 Of course it's relative: there are legal and social controls over drinking, just as there were on work before scientific management.

that the organization would become akin to machines and workers akin to machine parts.

That workers were regarded as no more than components in the organizational machine is important. It reflects very much an engineering mindset, in which the machine was an obvious model and metaphor. It reflects a derogatory attitude towards the supposedly almost less than human Catholics and foreigners that comprised the workforce. But it also reflects a pragmatism: these techniques overcame many of the problems of communication between people who spoke different languages. Perhaps most interesting of all, it reflected a particular kind of ethic, in a way which recalls du Gay's defence of bureaucracy. For Taylor believed that his system embodied an impersonal fairness: the fairness of 'a fair day's wage for a fair day's work'. It is easy to understand how this might be. Workers would no longer be dependant upon the patronage of a work gang leader, but would be paid and worked according to a fixed system. This would be of particular importance to, for example, an immigrant worker from Eastern Europe faced with the established position of an Irish foreman hiring and firing from within his own ethnic group. It is also the case that Taylor's system could make for a safer workplace. At a time when industrial injuries were rife, a system that devised a standard way of working which, if followed, would not just be more productive but would avoid accidents did have an appeal for workers. Taylorism has its problems, as I will explain, but it would be overly facile to dismiss the specifically ethical claims which Taylor made for it.

On the other hand, as one of the most prominent and insightful critics of the Taylorist system, Harry Braverman (1974) points out, for Taylor a fair day's work meant the maximum amount of work a person could physically do without collapsing, and a fair day's pay meant the minimum amount that could be paid to induce the worker to give this level of effort. Braverman remarks that you might just as well say that a fair day's work would be that amount of work which produces an output of equivalent value to what the worker is paid. But if that were so, the process would not yield a profit. Thus, from Braverman's perspective, scientific management must be understood in terms of its value to capitalist profit-seeking and not as any kind of fairness.

The introduction of scientific management provoked an enormous reaction. It is tempting from a current-day perspective to see it as a natural and unremarkable development in industrial organization. Because it, in fact, happened, it's tempting to think it *had* to happen. But that it happened was the outcome of a struggle which at the time

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did not seem determined, any more than present-day arguments about how to organize have a pre-ordained outcome. Shenhav (1999) shows how scientific management was a part of a whole 'standardization movement' (which included things like the standardization of tool sizes and machine parts) which was bitterly contested. Many critics said that standardization was inimical to American individualism, and would sap innovation and entrepreneurship.

Taylorism, specifically, was extensively resisted by workers and their embryonic trade unions. It is not hard to see why. The system entailed a massive transfer of power from workers to managers. It reduced autonomy, eroded working conditions and threatened unemployment (as more could be done with fewer people). Fundamentally, as Braverman and many others have explained, Taylorism implemented a radical and near complete separation between conception and execution, meaning planning and decision making, on the one hand, and carrying out orders on the other. This was the division of labour set out in Taylor's principles. Managers would decide, workers would act accordingly. One of the key decisions was over the hiring and training of workers, previously carried out by the work group itself. This is why Taylor's principle included the scientific selection and training of workers. Given all of this, the meaning of Taylor's final principle, co-operation between managers and workers, was a rather truncated one: workers had to undertake to do the work in the prescribed manner in return for the wages on offer (or fines for non-compliance), and leave everything else to the managers.

Everywhere that scientific management was introduced it caused conflict. Workers went on strike or left their jobs, and T&M studies were actually banned in US defence plants. Interestingly, it was not just workers who reacted against Taylorism. Owners and some senior managers objected too. For the system created a new breed of powerful managers, mainly production engineers. If, previously, workers had had the power that came from knowledge of how to do work, now it was these engineers who had privileged access to a baffling array of new knowledge. With their stopwatches, their myriad sheets of benchmarks and pay rates, they presented a threat not just to workers but owners and some managers. Taylor himself was sacked, because his employers did not appreciate the industrial unrest his system engendered. Embittered, he insisted that his ideas had not been properly implemented. But, importantly, he inspired a devoted group of followers who propagated and developed his ideas well into the twentieth century.

If the development of scientific management was contested, the watershed came with the First World War (1914–18). Now there was

a patriotic imperative to maximize production of armaments.⁹ Workers and others were asked to set aside their reservations in the interests of the war effort and, by and large, they agreed. But once the war was over, these methods were established and maintained. That is not to say that resistance ceased. On the contrary, Taylorist systems continued to provoke a wide array of responses. Sabotage, absenteeism and high staff turnover were the most obvious but, more insidiously, perhaps, was the tendency of such systems to breed low commitment and low quality.

What was going on here was a kind of unintended consequence of a type I indicated earlier. Taylorism treated workers as being motivated in a very simple way – carrot and stick, or pain and pleasure. There were targets: exceed them and gain a bonus, fail to meet them and get a fine. This idea that people are motivated solely by money had a self-fulfilling quality. If money was all that was on offer, then money could be all that mattered. Why should the workers care if what they produced was shoddy, why should they be committed to the product or to the company if they were simply treated as money-motivated robots? They did not. Instead, they churned out their product, got their bonuses (or didn't) and looked elsewhere for the things that made life worthwhile. In some cases, this was no more than the end-of-week drinking session. In others, it took the form of a remarkable flourishing of working-class culture in industrial areas. In Britain, the choirs of South Wales, the brass bands of Yorkshire colliery towns, the art clubs and mechanics institutes of many nineteenth- and twentieth-century towns are just some examples. The activities of trade unions and, later, the Communist Party were more political consequences. Much later, as these areas became de-industrialized, these activities in turn collapsed, which showed that they were indeed a by-product of industrial organization, leaving a cultural vacuum often either left hollow or filled with a diet of drugs, crime and reality-TV.

The evacuation of meaning from work also had implications from a managerial perspective. That so little energy and commitment went into work, that the quality of products was no longer a matter of pride to workers constituted the backdrop to much that was to happen in the management of organizations during the twentieth century and beyond (as I said earlier, yesterday's solutions are often the source of today's problems). But that lesson was a long time in coming, and even then was learnt in ways

9 This was true in the US even before that country's entry into the war in 1917 because US firms were producing arms for the war and there was already a sense that this was a patriotic priority.

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which reflected the engineering legacy of scientific management. In the meantime, what actually happened was an intensification of the Taylorist approach with the introduction of a system which, being pioneered at the Ford motor company, carries the unsurprising name of Fordism.

The Fordist system added a crucial innovation to that of Taylorism: the moving assembly line. Here, a mechanically driven conveyor belt brings the work to the worker, who stands at a fixed work station and performs a small operation upon the car (as it was at Ford) before it moves down to the next operative until the finished product emerges at the other end. The moving assembly line entails a massive simplification of the Taylor system because a huge number of those bodily movements which hitherto had to be prescribed by the T&M study were now mechanised. Workers were even more than before rendered as parts within the organizational machine. Moreover, it became possible for managers to gain greater control of the rate of work through the simple expedient of speeding up the conveyor belt.

But at the same time, and it is an important theoretical and practical lesson, this apparent increase in managerial power produced new kinds of power amongst workers (again, an example of an unintended consequence). For now it was possible to bring production to a grinding halt throughout the factory by the simple expedient of stopping production in one place. The familiar phrase 'putting a spanner in the works' captures this. By dropping (as it might be) a spanner in the conveying mechanism, the whole line stopped. And, in fact, this kind of sabotage is an enduring feature of Fordist systems. Ford himself managed to implement the system through a combination of offering relatively high wages and operating, especially during the 1920s and 1930s, in a high unemployment era. Nonetheless, not only sabotage but high levels of absenteeism and staff turnover dogged Fordism in similar ways and for similar reasons to the basic Taylorist system.

conclusion

Fordism represents the fullest working out of a particular, massively influential, approach to organizing work. So significant is it that many commentators have spoken of a Fordist era. As Merkle (1980) explains, it spread to all parts of the industrialized world, and its techniques were by no means confined to capitalist societies. On the contrary, Lenin and Stalin both admired Taylor's work and used precisely his techniques to undertake speedy industrialization of the largely

agrarian economy of the Soviet Union after the 1917 Russian revolution. That they did so reminds us that, whatever difficulties it faced or created, this approach to organizing allowed unprecedented levels of productivity. And we shouldn't be too moralistic about this: Soviet industrial productivity created the tanks and planes which played a central part in the defeat of Nazi Germany.

And this of course brings us right back to Weber's ideas. His observation that rational-legal, or bureaucratic, organization was taking over was the observation that such organizations were more technically efficient than others. The modern world is the world of efficiency in which the focus is upon the best means to achieve particular ends. The management principles of Taylor and Ford embody just this formal rationality and continue to define, at least partially and perhaps substantially, management to the present day. For, on the one hand, despite some talk to the contrary, it is possible to find organizations all over the world following precisely these principles in industrial settings which Taylor would have immediately recognized as similar to the steel fields of nineteenth-century America. But, on the other hand, even where the settings are less familiar, the basic idea of a rationality of means as the sole focus of managerial concern, the ideology of formal rationality, if you will, has endured.

Weber and Taylor were, of course, very different creatures. Taylor was an architect of this ideology whereas Weber was an observer and, in significant respects, a critic. They therefore appear in organization theory in rather different ways. In conventional, textbook accounts Taylor is seen as a pioneer in the emergence of modern management. The position of Weber is more interesting. His adoption into the 'canon' of organization theory (as opposed to conventional sociology) relied on a very partial reading of his work that ignored his reservations about bureaucracy and elevated his 'ideal type' to the status of a design model.

In this chapter I have tried to offer a somewhat different overview of these themes to that conventionally presented to students. On the one hand I have drawn attention to how the ideas of Weber and Taylor inform organization theory, and this in some ways overlaps with conventional accounts. But on the other hand I have tried to indicate some difficulties, limitations and complexities which such accounts fail to mention. However, that is not to say that these conventional accounts are unaware or unconcerned with at least some version of the problems I have alluded to. They are, and in the next chapter I turn to that body of organization theory which purports to rectify the limitations of bureaucracy and scientific management.