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David Marsden*

A Theory of Job Regulation, the Employment Relationship, and the Organisation of Labour Institutions**

Industrial relations theory must be applicable to non-union workplaces, and to do so, it needs to start from what union and non-union workplaces have in common, namely, the employment relationship. This paper sketches out a proposal for the reconstruction of industrial relations theory based on the work rules that are necessary for there to be a viable employment relationship. That is, a contractual form which would be mutually acceptable to both workers and firms. It is argued that there are four basic types of work rule capable of defining acceptable limits to employees' obligations within an open-ended employment relationship. These rules differ in whether their enforcement focuses on task- or function-centred definitions of job contents, and whether work is organised according to complementarities in production (the 'production approach') or to those in training (the 'training approach'). These approaches give rise to different types of externalities, and so demand different patterns of institutionalisation. On these contrasted patterns, the author builds a typology of approaches to industrial relations institutions, and highlights the advantages and limitations of weakly institutionalised and non-union work relations.

Eine Theorie der Arbeitsregulation, der Beschäftigungsverhältnisse und der Organisation der Arbeitsinstitutionen

Eine gute Theorie der industriellen Beziehungen muss auch für Arbeitsplätze gelten, die nicht gewerkschaftlich organisiert sind. Sie sollte also solche Regeln herausarbeiten, die funktionsfähige Beschäftigungsverhältnisse ermöglichen, weil sie von Arbeitnehmern und Unternehmen akzeptiert werden. Der Aufsatz versucht dies, indem er vier Typen von Regeln unterscheidet, welche grundsätzlich geeignet erscheinen, akzeptable Grenzen für die vertraglichen Verpflichtungen von Arbeitnehmern in einen unbefristeten Arbeitsvertrag zu schaffen. Die Regeln unterscheiden sich danach, ob eher aufgaben- oder funktionsbezogene Arbeitsinhalte durchzusetzen sind, und danach, ob die Arbeitsteilung entlang von Produktionskomplementaritäten oder nach Maßgabe verfügbarer Qualifikationen geschieht. Jeder dieser vier Regelungstypen verursacht andere Externalitäten und damit andere Regulierungsmuster. Der Autor entwickelt eine Typologie institutionell geregelter Arbeitsbeziehungen und wirft Schlaglichter auf die Vor- und Nachteile gewerkschaftlich und nicht-gewerkschaftlich organisierter Arbeitsbeziehungen.

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1. Introduction

In a major international comparative study, Katz and Darbishire (1999) demonstrate the need to re-think industrial relations theory from the bottom upwards. They show that among a diverse sample of advanced industrial countries there has been a dramatic decline in the influence of corporatist national and sectoral institutions, and a major shift of activity to the company and workplace levels. This is not the 'end of organised industrial relations' as some have argued pessimistically, but rather, a fundamental shift of focus away from macro-wage bargaining struggles towards job regulation. The causes are to be found in the increased exposure of domestic markets to international competition, and new disciplines of monetary control. These have simultaneously increased the pressures on firms to adopt more flexible structures and work patterns, and by restricting the ability of firms to pass on uncompetitive wage increases, they have reduced the advantages of setting wages and other employment conditions at national and industry levels. Such periods of organisational change provide insights into the underlying forces that make institutions function, and the relationships between them.

Katz and Darbishire's evidence points strongly to the need to pay greater attention to what they call 'employment systems'. While there has been some 'convergence' between the seven advanced industrial countries they survey with a common shift towards determining employment conditions at enterprise level, and away from national and industry levels, there have also been 'divergences' in the differing rate of adoption of various types of employment system. The analytical challenge thrown up by Katz and Darbishire is to understand the increasing diversity they observe *within* national and sectoral industrial relations systems. A related challenge is to understand non-union employment relations. Economic conflict and the bargaining of individual employees has not disappeared from the 80% of the US workforce outside collective bargaining. These are not necessarily institutional deserts. Labour markets confer considerable individual bargaining power to the majority of workers. Were this not so, the estimates of the average mark-up associated with union-bargaining over non-union conditions would be considerably higher than they are¹. In addition, many of the famous early studies of output restriction were conducted in non-union workplaces, a fact which explains why Hugh Clegg (1972) started his famous text book on British industrial relations at work group level.

Strangely, Katz and Darbishire do not say that much about the concept of employment system, although they do illustrate its potential empirical richness. In their account, they identify about seven different kinds of system. These include 'Low wage', 'HRM', 'Japanese-oriented', and 'Joint team-based', to which they add the 'Bureaucratic non-union', the 'Traditional "New Deal" pattern' and the 'Conflict pattern' when discussing the US. These differ along the dimensions of management

¹ The evidence also shows that union bargaining achieves a bigger mark-up for low-paid workers.

control, team structures and autonomy, pay systems, skills and worker representation. They use this typology to measure growing diversity of employment systems as new types emerge, and either supplement or displace older ones.

Another recent study, this time by two Dutch economists, Teulings and Hartog (1998), also calls for a reconsideration of the nature of neo-corporatist institutions. The institutional demise of the 'Swedish model', and the severe weakening of industry bargaining in the 'German model', have done much to undermine arguments about the economic significance of macro-bargaining and of 'political exchange'. To this one should add the sensitivity of the econometric evidence on the benefits of corporatism to how one classifies different countries (OECD 1997). Instead, Teulings and Hartog address the vulnerability of the employment relationship, one of the key economic institutions of the industrial world, to the 'hold-up' problem. In essence, the reason the employment relationship appeals to firms is that it is an extremely flexible transaction. There is no need to specify its precise content in advance, which is a tremendous advantage when market demand is uncertain, and work processes are almost impossible to codify. However, as product demand shifts, firms need to re-negotiate terms of employment. At such times, the whole relationship is vulnerable to breakdown because it is difficult to re-negotiate key aspects of the relationship when these are likely to affect to overall balance of power between both parties. Thus Teulings and Hartog argue that higher level institutions can provide a framework within which the wider bargaining power balance can be sustained while details are re-negotiated at the micro-level. They provide therefore a 'bottom-up' explanation of what corporatist institutions do in labour markets.

What I should like to do in this paper is build on both studies, and to show how an analysis of the dynamics of employment systems can help us understand the shifting balance within industrial relations institutions. I treat 'employment systems' as institutional frameworks that enable firms and workers to organise their collaboration while protecting both parties from certain kinds of opportunistic behaviour. At their centre is the employment relationship. Thus, I shall argue for a re-orientation of industrial relations theory away from macro-level institutions that seem to have rather less effect than was previously supposed, and towards the employment systems which underpin them. I shall do this by going back to the employment relationship itself, which is, arguably, the fundamental labour market institution of our day. By analysing the conditions that have to be met in order for both firms and workers to choose to organise their transaction within an employment relationship rather than some other contractual framework, I shall argue that we can account for the diversity of employment systems Katz and Darbishire observe. Although each type of employment system may be thought of as a stable equilibrium, each is vulnerable to breakdown under certain conditions, with the mutual benefits of a flexible relationship being lost. At this point in particular, wider institutional support plays an important part by facilitating orderly re-negotiation, in general, by making commitments by one side more credible to the other. I shall argue that each type of employment system makes certain demands on inter-firm institutions and that these

can influence the latter's structure. However, we have to take a lesson from the diversity of workplace relations within economies and within sectors covered by the same macro-institutions that Katz and Darbishire observe. Within certain limits, the same institutional functions may be served by different institutional arrangements.

2. The employment relationship and work rules

The employment relationship is a remarkable social and economic institution, as important as the invention of limited liability for companies. It solves a very difficult economic question: how to enable open-ended cooperation between self-interested parties given that each knows more than the other about important aspects of their joint work, and that the gains from cooperation also imply costs of separation.

For much of the nineteenth century, subcontracting had worked well when the outcomes could be easily defined and monitored². But it reached its limits as technical change and increasing complexity of production meant firms wanted more direct control over the work process, and to tailor work tasks more closely to their own organisational needs. This meant getting the ability to redefine workers' assignments without re-negotiation or with greatly reduced negotiation. To do this, they needed a new contractual form: the open-ended employment relationship.

For workers who distrusted the intentions of potential employers, an open-ended contract would have seemed a recipe for exploitation, and so it would become acceptable only as various protections were integrated. Coase, in 1937, captured its essence: it gives employers the authority to define workers' tasks *ex post* 'within certain limits' (Coase, 1937). These limits cannot be set by exhaustive job descriptions with complex contingency clauses (Williamson, 1975). Apart from the cost of writing such contracts, they would not work because their very detail would create endless scope for job-level bargaining. The solution that gradually emerged was to use certain kinds of transaction rules, or work rules, to identify the limits of managerial authority and of employees' obligations. To be effective, such rules have to be simple enough to be applied by ordinary workers and their line managers, far from the help of personnel departments and legal advice. The earliest such rules tended to identify certain kinds of work tasks, either by their complementarity, as in the case of the 'work post' rule common in French and US forms of taylorism, or by the tools and materials associated with certain tasks, as was common under British and US craft demarcation rules ('job territory' rules). Although 'taylorism' was originally a management invention, as Crozier's (1963) and Slichter's (1960) field studies show so well, the work posts very quickly transformed into a defensive mechanism for workers. Defining their jobs also delimits their obligations. In more recent years, work rules have developed that focus on functions rather than individual

². There were of course other moral hazard problems, notably with the tendency to flog the entrepreneur's capital equipment, to skimp on quality, and frequent disputes over use of raw materials. On the employers' side there was a frequent reluctance to provide training (eg. Slichter, 1919).

tasks. Although they are more flexible, they also require higher levels of trust and more complex relationships between work groups and management. Well-known examples can be found in the flexible work organisation of large Japanese firms, where, as explained in more detail later on, the ‘competence ranking’ rule often guides the distribution of tasks within work groups (Koike 1997, Yamanouchi and Okazaki-Ward, 1997). Similarly, in Germany, the ‘qualification’ rule commonly assigns work according to its skill requirements (Sengenberger 1987). Both of the latter rules establish a much looser relationship between tasks and workers’ jobs, improving task flexibility, but they do so by focusing on functions related either to production needs or to workers’ skills. Labour law and collective agreements have helped reinforce these work rules.

2.1 A typology of transaction rules

The same four broad types of employment rule can also be derived logically from the requirements for a viable form of contracting. They therefore have the special status of ‘constitutive rules’. To do this, we need to consider the sufficient and necessary conditions such rules must fulfil for there to be viable relationship over time. I assume that firms and workers are basically self-interested, and subject to bounded rationality. There are also important informational asymmetries between the two parties, both parties face costs if they break off the relationship, and that each knows that the other’s interests overlap but are not identical with their own. There is therefore scope for either party to behave opportunistically once the relationship has started, and both are aware of this.

To understand why workers and firms should voluntarily choose the employment relationship as the framework for their cooperation, one needs to know what is the alternative. The most practically and economically significant one is that of self-employment, where the worker operates in effect a one-person firm. Across the OECD countries, around one person in ten works as self-employed, and this covers a range of sectors and occupations (OECD 1992). From the growth of self-employment in certain activities, and from mobility studies reviewed by the OECD, we can see that people do move between employment and self-employment, and that firms also choose between hiring people as employees and as, say, ‘consultants’. Historically, we know that in the nineteenth century, various forms of contracting predominated over employee status (Mottez 1966). We know too that tax arrangements also affect the choices firms make, which presumably indicates that net economic advantages weigh heavily in their decisions.

The key to the relative economic advantages of one or other form of contract lies in the need for *ex ante* specification of work outcomes or tasks in the case of self-employment, and the scope for *ex post* definition of a worker’s duties within the employment relationship. There is also a grey area in which some *ex post* specification of tasks occurs for the self-employed. However, it can be shown that such cases often depend upon the existence of the same kinds of work rules as those found in the employment relationship, notably where there are strongly developed

occupational skills (Marsden, 1999: Ch. 8). Enforcing open-market contracts, such as in self-employment, is made relatively easy because the terms of the contract are agreed in advance, and the parties have an interest in ensuring the degree of ambiguity is small. Because the agreement is *ex ante* there are few sunk costs. The situation is quite different with the open-ended employment relationship which is more like an agreement to work together, albeit under the employer's direction, than a market exchange. Sunk costs can be considerable on both sides: at a minimum, job search and recruitment are expensive, and the sunk costs rise if there is significant investment in firm-specific skills and such like. There are great potential gains, particularly for employers, from the open-ended nature of the relationship. The costs and rigidities of defining tasks or outputs *ex ante* are avoided, and firms do not need to know the precise timing with which they will need certain kinds of work. Coase and Simon develop the different aspects of these benefits with great elegance in their two famous articles. Slichter et al (1960), and Williamson (1975), all in different ways, show the costs of trying to work with tightly defined tasks and work assignments, and Crozier (1963), also with great elegance, shows the perverse effects of defining work tasks in too much detail. No doubt this helps explain why, even though there is real choice, nine out of ten workers are engaged as employees in the advanced industrial economies.

Coase puts his finger on the central problem of the employment relationship by saying that it gives the employer the authority to assign work 'within certain limits'. Unlimited employer power would be slavery, and more important, in a liberal economy with a free labour market, there would be few takers. What he does not explore, however, is how these limits are set. Indeed, almost no one does. It is assumed often that there is a set of tasks between which employees are indifferent, and that they agree to employer discretion within this set. It is assumed employers might pay a supplement for tasks outside that set. However, as I show in 'Employment Systems' this opens the door to opportunistic bargaining. A similar point is made by Teulings and Hartog (1998): the whole beauty of the employment relationship, for an employer, is that it insulates work assignments from further bargaining, and so avoids the opportunistic re-negotiation associated with the 'hold-up' problem. Willman (1986) shows just how damaging continuous bargaining over assignments was for productivity in the British car, dock and printing industries.

Limits to managerial authority are essential, and they can only be provided by some kind of rule. We need therefore to consider what are the *sufficient* and *necessary* attributes of such rules for a viable employment relationship: one that will be freely chosen over its main alternative. Taken together, these are represented by the *efficiency* and the *enforceability* constraints.

A *sufficient* condition for workers and firms to choose to cooperate through the employment relationship is that it should be mutually beneficial compared with the alternatives. The arguments of Coase (1937) and Simon (1951) take us part of the way by showing the overall gains that can arise as compared with the main alternative, some kind of sales contract. However, it is not sufficient because it is

possible that one party will try to appropriate all the gains. Given the sunk costs each has in the relationship, the losing party may often be worse off if this happens. A *necessary* condition, therefore, is the existence of a rule that ensures both parties gain, in other words, that clarifies the extent of employees' obligations to their employers in a way that can be enforced. Unless this can be done, then one or other party will refuse to engage in the relationship. However, enforceability is not enough on its own. Work assignments could be determined by the colour of an employee's eyes. Enforceable rules must also be productively efficient, and define obligations in such a way that employees' competencies match employers' job demands. Indeed, by aligning these, the rule boosts the 'added value' of the employment relationship by organising the training process and job classification systems.

Taken together, satisfying the *enforceability* and *efficiency* constraints is necessary and sufficient to ensure a viable employment relationship. As a result, one can regard the two constraints on employment rules as the basis for an exhaustive classification of employment rules given the basic assumptions of the Coase-Simon approach. Broadly speaking, employment rules may satisfy each constraint in one of two ways, and this founds the typology of rules shown in Figure 1.

Figure 1: The contractual constraints and common employment rules.

		Efficiency constraint	
		Job demands identified by:	
Enforceability constraint		Production approach	Training approach
The focus of enforcement criteria	Task-centred	'work post' rule	'job territory'/'tools of trade' rule
	Function/ Procedure-centred	'competence rank' rule	'qualification' rule

There are two broad approaches by which employment rules establish the *enforceability* of work assignments. They may focus either directly on attributes of individual work tasks, or on functions within the production or service process. A famous example of the first, widely found in craft work environments, is to identify the tasks belonging to particular 'job territories' by the tools or materials used: 'the tools of the trade'. Such simple rules provide a very robust way of delimiting the boundaries of the jobs of one group of workers and determining where those of another begin. Within professional work, where distinctive tools figure less prominently, boundaries are often drawn by identifying key operations that must be undertaken only by those holding a particular qualification. Another famous rule, common in both blue and white collar environments, is that of the 'work post' under which tasks are grouped according to complementarities in production and assigned exclusively to individual work stations for which individual workers are responsible. Usually, neither of these rules are enforced rigidly, but the important thing is that

everyone knows they may be invoked should work relations deteriorate. Likewise, management tends to enforce work rules strictly only in periodic 'crackdowns' when effort seems to be drifting in the wrong direction. 'Working to rule' is a pressure tactic and not usually the normal method of working.

The other approach to enforceability is to assign work tasks on the basis of functions. Mostly, these transcend the jobs of individual workers and so place a heavy reliance on stable dynamics within work groups. It can be shown that a seniority- or competence-based ranking rule can enable a flexible allocation of tasks within a work group (Marsden, 1999: Ch. 2). Similarly, recognised qualifications can be used to assign types of work which pose similar technical demands. With function-centred rules enforcement is trickier than with task-centred rules, and depends on a higher degree of cooperation between workers and management. They are vulnerable to a breakdown in trust, there being no safety net of minimal compliance as under the task-related rules, and this vulnerability is a strong incentive for employers to behave cooperatively.

To satisfy the *efficiency* constraint, work assignments can be organised according to complementarities either in production or in training. These are the *production* and *training* approaches. They diverge mainly because of the different cost structures of informal on-the-job training (OJT) and formal off-the-job instruction. The first has low set-up costs, but costs rise steeply as the share of trainees increases. The second has high set-up costs because of the investment in special training facilities, but falling average costs per trainee. Organising work according to production complementarities leads to what Williamson calls 'idiosyncratic' jobs, whereas seeking to maximise the utilisation of expensive training causes firms to group tasks according to their training requirements. Intermediate forms, in between the production and training approaches, tend to be unstable, gravitating to one or other form over time (Marsden 1999).

2.2 Examples of common rules under the four employment models.

Common examples of the rules corresponding to each type are shown inside the boxes in Figure 1. Maurice et al. (1986) describe the operation of the *work post* rule in French industry as an 'aggregation of tasks sharing certain technical demands', and observed the frequent heterogeneity of tasks grouped into particular jobs. As in Cole's (1994) account of the same system in the US, work is organised by assigning one person to each post and holding them individually accountable for the tasks it includes. It is the typical taylorist solution in production and bureaucratic services.

The occupational *job territory* shares a number of features with the work post rule, and especially, the identification of a specific set of tasks with a particular type of worker. However, being based on the 'training approach' tasks are grouped for the efficient utilisation of workers' skills. The 'tools of the trade' rule is a very simple way of identifying the tasks that belong to particular occupations, and of limiting the range of tasks over which management may deploy such workers. For both rules,

their clarity and widespread recognition make it easy to identify breaches by either party, and facilitate calling on the assistance of other groups covered by the same principle in times of conflict.

The *competence rank* and *qualification* rules both enable the task content of jobs to be defined more flexibly and give rise to more diffuse job boundaries. They link tasks to jobs indirectly through procedures that are essential to the process of work and skill formation, and avoid the rigidity of the strict identification of task to job. Skill formation within the production approach depends on stable OJT. The competence rank rule regulates flexible task assignments by the way it structures the work group assigned to a particular function, awarding rank on the basis of technical and relational capabilities learned through OJT. Workers of higher rank can tackle more complex operations, and are expected to assist the OJT of junior workers. Ranking workers by the range of skills they have mastered and their seniority gives order to the group, and progression up through the ranks gives workers a visible indication of how far their abilities are recognised by management.

The *qualification* rule shares some features with the competence rank rule in that recognised competencies provide the basis for task allocation, except that it belongs within the training approach, and the criterion of competence is recognised vocational training. This provides a procedure identifying both the skill and the person holding it. Under both the competence rank and qualification rules, the pressure on management to behave cooperatively is strong because neither system has the safety net of detailed job specifications that can be enforced if cooperation breaks down. The same rules can be shown to regulate problems of 'moral hazard' over the quality of job performance (Marsden 1999).

These rules regulate job boundaries, but they also assist the control of working time and play a key role in performance management through their incorporation into job classification systems. They help control working time because, in team production, they make it hard for management to ratchet up the working time of individuals without doing so for the whole team. If one individual's production rises faster than that of the others, it simply leads to bottlenecks, which is, after all, the classic problem in production management of 'balancing the line'. It is much easier for management to pressurise individual employees to raise their working time if they can redistribute tasks, but at this point, they encounter obstacles from job boundaries.

In performance management, the essential problem is to determine whether work has been to a desired standard or not. The moral hazard problem is serious. Employees may fear that management will manipulate performance measures in order to renege on agreed payments, and management may fear that workers will renege on aspects of quality that are difficult to monitor directly. Job contents cannot be defined by elaborate contingency contracts, nor can performance standards. At least, this cannot be done while still maintaining the flexibility and relative cheapness of the employment relationship. Here, job classification systems play an extremely important role. By classifying certain jobs as belonging to the same type, it becomes possible to establish a rough and ready guide to reasonable performance standards. Workers and line

managers can compare jobs that are classified similarly within the same organisation, using them as benchmarks for reasonable standards. One of the most interesting conclusions of Lutz's (1976) seminal study of performance standards in piecework, surely the most plausible area for expecting objective standards to apply, was that such standards always contain a large relative component. The simplest and most robust way in which this can be established in a particular workplace is by identifying comparable types of jobs. Although there is not space to do this here, it can be shown that there is a close match between norms of performance management and the four types of transaction rules.³ This should not be surprising because they both develop under the same kinds of constraints. Given this, work task and performance rules work best when they are mutually consistent, but beyond that, one can see that management and workers will focus on those aspects of performance that are most vulnerable to moral hazard under each of the types of work rule. Thus, under the training approach, performance standards are strongly influenced by occupational and professional norms acquired during training, and under the production approach, greater reference is made to internal job classifications. Under the work post rule, performance standards tend to be more quantitative, stressing the supply of effort because many of the qualitative aspects are already dealt with by the delimitation of tasks (Reynaud 1992). Worker cooperativeness is highly stressed under functional methods of job design as this is the element most vulnerable to moral hazard in that kind of work system, as is widely observed under the systems used in large Japanese firms (Koike 1997).

3. Regulating the employment relationship: the role of labour institutions

The analysis so far has focused on the relationship between work rules and job-level considerations. How do inter-firm institutions contribute to the functioning of such rules, and what are their effects? It is helpful to start by considering the case in which employment rules diffuse without the intervention of higher level institutions, out of the decentralised interaction of firms and workers. This will help to bring out the nature of employment rules in non-union environments. By showing that these are also institutionalised, we can break away from considering employment regulation in the presence and in the absence of labour institutions, and think instead of different types of institutional regulation, and consider the different externalities that have to be resolved.

3.1 Decentralised diffusion of employment rules

The ability of employment rules to delimit workers' obligations to their employers depends very much on their robustness, that is, the ease with which they can be applied routinely by employees and their line managers, away from the expert services of the personnel division. They must be readily understood by all parties, and their outcomes must be fairly predictable. Rules that give rise to ambiguous outcomes increase the scope for opportunistic behaviour, as do rules that are too complex. In his

³ . This is demonstrated in the chapter on performance management in Marsden (1999).

study of French workplace relations, Sainsaulieu (1988) provides some very good examples of just how complex rules provide opportunities for manipulation and further negotiation, as indeed does Crozier's account of the vicious circle of bureaucracy. Some of the most famous rules associated with job demarcations in craft work in Britain and the US were very simple, picking a familiar type of tool or material. Of course, these did not define the whole content of the job, but rather gave clear indicators of its boundaries with regard to other jobs.

The more widely used a particular rule becomes, the more familiar everyone is with its working and its outcomes. Work is cooperative, and hence a whole group of workers and their line managers need to know how such rules function. Like the rules of the Highway Code when driving, one needs to know not only what one should do oneself in particular circumstances, but also what actions others will undertake. Only then can one enter a roundabout or junction with confidence, and only then will traffic flow freely on busy roads. Hence, the fact that a rule is widely used becomes a reason for adopting it compared with the alternatives. Thus, even if each of the four types of transaction rule were equally placed initially in a certain environment, should one rule happen to become more widely adopted, it would engender a cumulative process by which its greater familiarity would favour its further diffusion at the expense of the others. A second aspect follows from the logical argument earlier that there are only four basic types of rule, given by the combinations of the two contractual constraints (Figure 1). Firms are restricted in their choice for regulating the employment relationship by the difficulties of satisfying these two contractual constraints. This means that firms effectively face a fixed menu of viable types of rule.

Thus, even in the absence of any central guidance, and relying solely on decentralised decisions by firms and workers, one can envisage a considerable degree of uniformity gradually extending across individual labour markets or sectors, or sometimes even whole economies. Implicit in this argument is that firms remain free to choose any of the four types of rules, but such freedom comes at a price. If they adopt a non-standard rule, they have to invest more in training people in its use, and they have to signal harder, and at greater expense, to their employees that they will stick by them. Thus, IBM could for many years practice aspects of Japanese style employment systems in the midst of firms that did not wish to commit to employment security, and that continued to use work post systems. But it had to invest more resources in gaining employee confidence than if it had done so in an economy in which such practices were the norm. Appelbaum and Batt (1994) offer a number of examples of the difficulties US firms face in trying to adopt 'high performance' work systems because of the externalities imposed on them by firms operating more traditional north American employment systems.

US civil service reform provides a very good example of such 'institutionalisation' of personnel practices (Tolbert and Zucker, 1983). States that adopted the new system early on did so because it suited their needs. Late adopters did so because the norms were seen as good practice. As a result, the correlation

between the requirements of state administration and reform patterns that held among the early adopters diminished over time as other states adopted the same practices.

Given that any of the four types of employment rule may diffuse as a result of decentralised management worker decisions, what role is played by inter-firm institutions?

3.2 *Institutionalisation by collective action*

Collective action, whether promoted by workers, firms or the state, provides the other channel for diffusion of employment rules. This can occur in two ways. They may give a decisive advantage to one type of rule by encouraging its adoption so that it becomes the accepted norm. A very good example of this is shown by Jacoby's (1985) study of how the US war-time administration encouraged the adoption of scientific management and its associated personnel systems so that the work post system became deeply entrenched in both union and non-union workplaces there. In France, the employer and union activism of the Popular Front years was decisive in establishing and generalising the same model there. This set the mould of established practice, again securing the dominance of the work post rule and incorporating it into job classification agreements (Jobert 1990). This type of institutional support primarily serves to consolidate the position of one or other of the types of employment rule.

The second channel of institutional support arises from the way in which inter-firm institutions enrich the range of sanctions either party may apply in order to enforce its understanding of employment rules. As mentioned earlier, Teulings and Hartog have shown that re-negotiation is an especially problematic time because the sunk costs have made the 'exit' option expensive. However, this is only one of a range of problems where inter-firm institutions can boost the flexibility with which the employment relationship operates. I shall consider first some of the common problems that arise under micro-level bargaining, and then some that arise especially under the training approach. In both cases, collective action plays a key role by involving actors outside the immediate transaction, and in doing so, it contributes to both the individual and the collective benefits from an effective coordination mechanism: the employment relationship.

The control of externalities in micro-bargaining

The work rules outlined earlier solve the problem of defining the limits of managerial authority over work assignments, but they themselves can become the object of moral hazard. This can take several forms:

- Either party may take advantage of information asymmetries to impose their interpretation of the rule;
- There may be mutual gains from a flexible application of the rule, provided this is not used to redefine the rule itself;
- Changing economic circumstances require that work rules be adapted periodically, and this has to be achieved without opening up everything for re-negotiation;
- Work rules will function more stably if their broad principles are codified in some kind of collective agreement (eg. in a classification agreement).

Most social rules create scope for individuals to find short-cuts which are attractive precisely because everyone else is observing the rule. For example, because people generally tell the truth, individuals can profit, at least in the short-run, by telling lies. But if no one respected the rule, lying would be useless, indeed, verbal communication would break down. Thus, workers may enter an employment relationship in the expectation that management will respect the spirit of certain employment rules only to find all sorts of pretexts being used to justify different tasks or higher work loads. Likewise, workers may take advantage of their greater job knowledge to try to pull the wool over the eyes of their managers (for some good examples see Roy (1952) and Burawoy (1979)). How can individual workers or managers enforce what they believe to be the fair interpretation? Often it is difficult within the confines of an individual workplace. On the other hand, if either side can call on the support of an outside organisation, a union or an employer's association, then there is scope for escalating the dispute. This has two important implications. First, it increases the ability of individual work groups and managers to draw on additional support and so raises the potential cost of opportunistic application of work rules. This in itself can increase the readiness of workers or managers to accept particular work rules because they are more confident that a fair interpretation can be enforced. Second, any outside coalition would quickly dissipate its strength if it supported every grievance, so it is necessary to be selective. Thus, unions and employer organisations have every reason to make a judgement about which of their members' grievances should be backed up, and which refused. They will therefore usually wish to discourage opportunistic claims. William Brown (1973) gives some nice examples of how shop steward committees refused to back what they felt were opportunistic claims of workplace custom by some groups which would threaten to undermine their overall bargaining relationship which benefited all work groups in the firm. Thus, inter-firm coalitions of workers and firms can contribute to the greater effectiveness of employment rules in two ways. They increase the confidence of individual groups that they can escalate their action if they believe they are being unfairly pressurised by the other party; and they can police the actions of their own members and so discourage action in bad faith.

Support of inter-firm institutions also makes it easier for flexible application of rules in the workplace. One of the problems of flexible application of rules in a decentralised environment, especially when the rules are only partially codified, is that this can cause the actual content of the rule to drift over time as today's flexibility becomes tomorrow's norm. If the rule's point of reference is embedded in current work group relations, then it is hard to resist this process. On the other hand, if there is a collective agreement, or an informal norm that applies across workplaces, such as could be found in craft demarcation rules, then there is an external point of comparison. If people know that the base-line of their cooperation will not be compromised by working flexibly, then it is easier to envisage doing so.

Institutions external to the firm can also assist with adapting employment rules to changing economic and technical circumstances. It is very difficult for the parties

to engage in such negotiations at the workplace level because the outcome affects the applicability of the employment rules, and this affects the power of either side to sustain its position. It is therefore much safer for individual groups to refuse negotiation, or to stall, and thus to slow change. Re-negotiation of employment rules is much easier when supported by higher level institutions. A striking example of this can be found in the Dutch flexibility agreements which, once agreed at the peak level, created a framework for change at the local level. Visser (1998) argued that this enabled the very rapid spread of new practices across firms in the Netherlands whereas relying on decentralised renegotiation of employment terms had proved very slow and uneven.

Finally, job classification rules, especially when applied across firms, aid the transparency of job regulation. They respond to one of the fundamental problems of economic organisation highlighted by Simon and Williamson. When economic agents are only boundedly rational, they need a language with which to handle the complexity of job information. This is provided by the categories of job classifications. In effect, these determine the agreed criteria for comparing jobs within and between firms. They are used for determining pay rates for different kinds of work, and they can be used to determine work standards by fixing the type of qualification required on hiring. As mentioned earlier, they can also guide people within organisations as to work demands and performance standards. Koike (1994) has shown that it is common in large Japanese firms, where job classifications are typically very broad, to display a 'job grade matrix' showing to all concerned the different competencies that management recognises individual workers as holding. In this way, workers can judge how fairly they are treated, relatively to each other, and management offers a gauge of its good faith in operating a flexible system.

In his very perceptive study, Jacoby (1985) shows how central job classification was to the development of modern pay and performance management systems in the US, and in particular how they served to replace the internal contract system. This gives a clue as to their wider significance that has not been fully appreciated. Outside auction markets where people are trading for unique goods, one cannot have a set of prices without an equivalent set of categories to which they apply. What job classifications do in the first instance is to establish such categories. However, as Jacoby shows, they also play a critical role in personnel administration. They enable management to coordinate the work of the diverse range of employees within the organisation, to know what kinds of tasks different employees can be expected to perform, to what standards of performance, and at what rate of pay.

The control of externalities under the training approach

The training approach to work organisation and identifying legitimate work assignments takes employee skills as given, and organises jobs and work assignments around them. The presence of occupational skills simplifies a number of job regulation problems as compared with the production approach because the training process helps to socialise workers and line managers into accepted norms of work

distribution and job performance.⁴ In her study of professionals operating within bureaucratic organisations, Zucker (1991) shows how their work is regulated by reference to professional standards, and that in cases of dispute, bureaucratic managers are often dependent for advice from other professionals outside the organisation.

On the other hand, the training approach, and the occupational markets associated with it, are vulnerable to various types of free-rider action which need to be controlled by inter-firm institutions. As is well known, Becker (1975) predicted that trainees would bear the cost of training for transferable skills because their very transferability means employers cannot be sure of any return on their investment. Nevertheless, most of the empirical research on training costs for blue-collar apprenticeships shows that, overall, the costs borne by employers are considerable even when account is taken of low rates of apprentice pay and of their productive contribution during training. Becker would predict that under such conditions, employers would cut back on such training, and one would see a decline such as has occurred in British apprenticeship training in recent decades.

Most of the arguments advanced by economists to explain why employers nevertheless pay for general or transferable training depend on the existence of some kind of 'stickiness', mostly attributed to informational problems. However, these are removed in the case of certified skills. Hence, the critical role of institutional regulation of occupational markets lies in the control of tendencies by individual employers to 'defect'. Without institutional support, occupational markets are unstable because the greater the shortage of skills, the greater the incentives to poach and the less the incentives to provide general training. The decline of apprenticeship training in Britain compared with its continued vitality in Germany illustrates this process (Marsden, 1995).

Employer provision of training for occupational skills only incurs a competitive disadvantage if some firms train and others do not. As a result, if high involvement of firms is maintained, then the temptation to free-ride is correspondingly weaker. Likewise, it is easier to sanction a small than a large number of free-riders. Hence, provided a high overall rate of training can be sustained, then it is possible to avoid entering a vicious circle in which employer cut-backs on training cause skill shortages which then raise the incentive to free-ride, engendering further shortages.

Occupational markets also require other forms of institutional support in order to function. If costs are to be shared, then trainees need to be sure that employers will provide suitable vacancies for them, and there needs also to be a sufficient degree of

⁴ The training approach is not logically dependent upon the prior existence occupational markets: this was demonstrated by the way large German firms in the late nineteenth century organised their own internal apprenticeship training systems to make up for the inadequacies of the pre-existing apprenticeship system (Lutz, 1976). However, its effectiveness is greatly enhanced by the establishment of occupational markets, not least because they help to establish familiarity with certain types of work rules thus making them more robust.

standardisation of training contents and standards. Thus, from both the employer and the employee side we arrive at the need for an institutional infrastructure to support the working of occupational markets, and thus, of the training approach within the employment relationship.

3.3 *Job and pay classification rules*

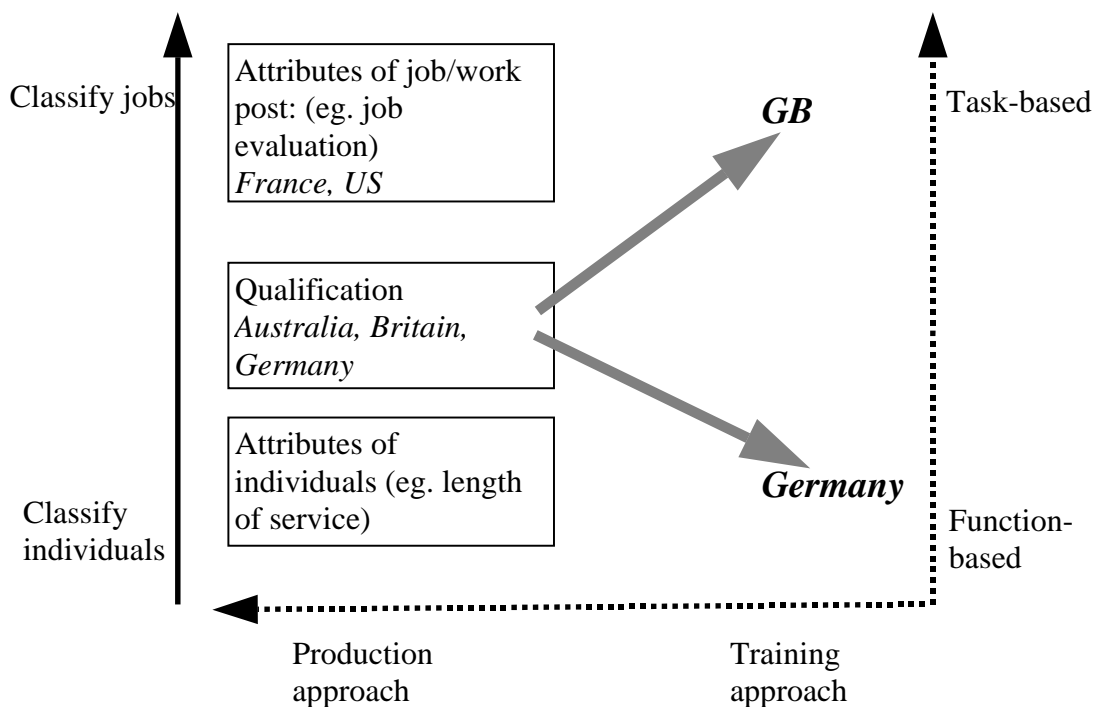
As mentioned earlier, job classification rules play a very important part in the employment relationship. They reduce the natural idiosyncrasy of jobs and help to identify contours of similarity and equivalence that have been recognised by management and workers as relevant to their relationship. They also identify what is being paid for. In view of the scope for opportunistic bargaining that Williamson shows can be associated with job idiosyncrasy, it is hard to imagine that in any but the smallest of firms an employment relationship could work without a system of job classification.

Until a recent international study by Eyraud and Rozenblatt (1994), job classifications had long inhabited a twilight zone in industrial relations theory, as a rather arcane area of personnel administration. What their study shows is that the incidence of job classification systems is not arbitrary. Indeed, they mirror closely the work rules outlined here as can be shown by re-working the typology of classification rules Eyraud and Rozenblatt derived from their country studies. They placed job classification systems along an axis from systems that classify job characteristics, such as those common in France and the US, to those classifying worker characteristics, such as those commonly used in large Japanese firms, where length of service and individual performance ratings play a large part. They placed the systems used for skilled workers in Australia, Britain and Germany sometimes in the middle, and sometimes in a separate category, reflecting their unease at treating skill as a pure job characteristic or as a pure individual characteristic. Because the skills were certified they appeared to be more than a job characteristic, but at the same time, their strong occupational identity meant they were not strictly speaking an individual characteristic.

Re-working their data, one can show that their classification fits that of the four types of transaction rules developed earlier. In fact, seniority is not really an individual characteristic but is rather an indicator of one's membership position within a group, and the 'merit' half of 'nenko' comprises a strong element of cooperation and being a good work group member. The occupational skills found in Britain and Germany are likewise neither job nor individual characteristics. They match job characteristics because employers design jobs according to the supply of skills, and they relate strongly to particular occupations because they are based on a shared training process and skill norms. The British and German models of craft skills differ: in the former case they focus on task attributes to establish job boundaries, and in the latter, on the type of theoretical knowledge required by the work on hand.

There are several theoretical reasons why job classification systems should line up with, and incorporate the four types of work rules. The first is that the classification systems are classifying jobs, and if the jobs are defined according to a certain logic, to apply a different logic when classifying them will lead to inconsistencies. Thus applying the same principles will maximise their mutual effectiveness as a language for describing jobs and their interrelationships. Conflicts between the logics of the two systems would undermine the robustness of both, and beyond a certain point, would reduce the attractiveness of the employment relationship over other methods of contracting. A second reason is that job classification systems are in fact holistic and not atomistic. In other words, they proceed from a totality of work to be done, and then divide that up according to certain logical principles. Because they are classifying jobs, they need to apply a logic similar to than inherent in the job definitions themselves.

Figure 2: Eyraud-Rozenblatt model of classification agreements



Key: the hatched lines show the categories of transaction rules; the solid line shows those of Eyraud and Rozenblatt. The thick shaded arrows show the amended version of the authors' treatment of qualification-based classification systems.

Classification systems take the principles of job regulation from the nano-level to the levels more commonly dealt with by company personnel systems, collective agreements and legal regulation. As such, they are an important step in the institutionalisation of transaction rules. They take us from the regulation of job boundaries and job performance into higher levels of institutional action.

4. Effects on the behaviour and structure of labour institutions

The growing diversity of employment relations within established national and sectoral industrial relations systems that Katz and Darbishire observe cautions against any strict, one-to-one, relationship between institutional structure and the functions those institutions provide. Nevertheless, the theory advanced so far has implications for the structure of labour institutions. Each type of transaction rule involves different kinds of externalities which pose, in turn, different collective action problems and so place different demands on labour institutions. Thus, one would expect institutional structures to evolve in partial response to these needs. Likewise, once the labour institutions and transaction rules in a particular sector have evolved to match each other, they would provide each other with mutual support.

In what follows, I explore the support given by collective action to the two contractual constraints: how they improve the enforceability of transaction rules, and enhance the efficiency of the match between skills and job demands. As one of the key goals of labour institutions is to further their members' employment interests, one would expect them to evolve in ways that support the needs of the employment relationship.

The most important contributions of wider, inter-firm, institutions discussed so far lie in the way they:

- Provide collective sanctions to help enforce transaction and classification rules within the enterprise, thus making them more predictable;
- provide the channels for re-negotiation;
- contribute to workplace trust; and
- support occupational and, to a lesser degree, internal labour markets.

4.1 Institutional implications of task- versus function-centred employment rules.

Taking the enforceability axis, the potential role of collective action differs among the function-centred transaction rules (Figure 3). The root cause lies in the clearer specification of workers' job obligations, and the greater use of individual accountability for job performance in the former compared with greater reliance on work group dynamics in the latter. Under task-centred rules, individual negotiation remains more readily an option because of the individualisation of work obligations and worker accountability. In the event of a break-down of cooperative relations, management has a system of clear job descriptions on which it can rely to secure minimum performance under the threat of sanctions.

The function-centred rules lack a comparable safety net of minimum compliance because they rely upon flexible interaction among work group members in order to fulfil functions that comprise variable task demands. In this case, work groups can be both a source of flexibility for management and a power base of worker opposition. Without the safety net of prescribed performance, management needs to enlist the collective support of the work force, and it cannot afford to slide into adversarial workplace relations.

Likewise, although the need for re-negotiation might arise more frequently under task-centred rules because individual jobs are more narrowly defined, there is, at the same time, greater scope for individual re-negotiation using such occasions as new hires, promotions and reassignments to alter job contents and performance standards. Under the function-centred rules, the need for such re-negotiation arises less frequently because of the more diffuse scope of individual workers' jobs, but when it does arise, the individual option is not available. Where re-negotiation involves change in the way the basic transaction rules take effect, the individual option remains easier under the task- than the function-centred rules because change can be handled to a greater degree on an individual-by-individual basis.

Figure 3: The scope for institutional action to support task- and function-centred employment rules.

Areas where collective action may restrain opportunism	Task-centred rules	Function-centred rules
Handling opportunism over normal performance obligations	Job descriptions necessarily incomplete & sunk costs open up scope for pressure from either side.	Work group dynamics used for flexible allocation of work can be manipulated by management through peer pressures, or can be turned against management as a basis of group power.
Re-negotiation	Usually impinges on basic work rules so threatens the very rules that provide protection. The more sharply job boundaries are defined, the more frequently re-negotiation becomes necessary.	Need arises less frequently, but becomes an issue when work reorganisation impinges on work group basic structure & incentives & when basic guarantees on which flexibility is based are challenged. Not amenable to individual negotiation.
Need for workplace trust	Low trust requirements because greater specification of performance obligations eases enforcement if there is conflict, although more trust may increase flexibility.	High trust essential because there is no clearly defined minimum/maximum set of obligations. Autonomy & power of work group can cut both ways.
Role of collective workplace representation	Not essential because individualised accountability means individual negotiation always an option. External collective action can discourage opportunism under normal conditions & ensure re-negotiation is bona fide.	Necessary because jobs are linked to functions through work group organisation.
Cooperative/adversarial tolerance	Can function if work relations are adversarial, albeit in a more restrictive way.	Need cooperative relations in order to function. If adversarial, work group can serve as a countervailing power base against management

At several points, I have suggested that the transaction rules use key landmarks to establish job boundaries rather than detailed descriptions, and that they may often remain in the background rather than dictate current job contents. This is because their purpose is to protect against potential opportunism by the other side. This is different from saying that the parties will always behave opportunistically. Should trust develop between them, then the rules can be applied more flexibly. On the whole, one is much more likely to trust one's business partner if one knows one can

inflict sanctions if he or she defects. Collective action, drawing in actors who are not party to the immediate transaction, is both an important sanction and a means of dispute resolution. Collective organisations have to be selective when deciding which members' grievances to back, and so they also play an important role in policing the actions of their own members. They can therefore play an important part in supporting the trust needed for flexible operation of transaction rules, and in providing a framework within which their application can be re-negotiated, ensuring such re-negotiation is in good faith and is not entered with opportunistic intentions.

Of the two types of transaction rule, the function-centred ones have the greater dependence on cooperative workplace trust relations, and so one would expect them to be the more likely to develop various forms of workplace participation. Indeed, they depend to a large degree upon such frameworks. The pay-off for management lies in the greater task flexibility, which, if well-developed, can also serve as the basis for effective workgroup problem-solving activities, as compared with the task-centred rules.

4.2 Institutional implications for the production versus the training approach.

Turning to the second axis, that distinguishing the production from the training approaches (Figure 4), one can see a second set of collective action problems that are likely to shape the development of labour institutions. Whereas the key problems underlying the enforceability constraint were those of work assignment and job performance, those underlying the efficiency constraint revolve around the recognition of skills and competencies on the employer's side, and the willingness of skilled workers to pass on their knowledge on the workers' side.

A key difference between the production and training approaches lies in the different demands they make of collective action. The externalities associated with the training approach are fairly easy to see. The principal economies derived from organising work around training arise from many firms applying the same norms of skill formation and skill recognition and defining vacancies that match the skills on offer. These are conditions needed for successful occupational labour markets. While there is a strong shared benefit from their existence over the long-term, firms may undermine this by their short-term actions, for example, by reducing the transparency and transferability of the skills they form in order to restrict subsequent mobility by their skilled workers. Occupational markets are also vulnerable to a break-down in the sharing of training costs between the firm and its trainees. In such cases, firms often bear a disproportionate part of the cost, and this sets in motion incentives for firms to poach those trained by others. Cost sharing rests on there being adequate institutional protections for skilled workers: that it should not lead to trainees acting as a source of substitute cheap labour, and that trainees should have the prospect of an adequate supply of suitably defined job vacancies. On the employers' side, there needs to be protection against free-riding by employers who cut their own training and take advantage of common skill norms in order to poach. All of these pressures point towards institutional arrangements that span many firms operating within the

same occupational labour markets, and thus to institutions providing horizontal coordination. Good examples can be found in craft and professional labour markets, and in the system of local employer organisations in Germany, the chambers of industry and commerce, that oversee vocational training and provide channels for peer group pressures on recalcitrant employers.⁵

Figure 4: The scope for institutional action to support the production and training approaches

Areas where collective action may restrain opportunism	Production approach	Training approach
Handling opportunism over skills and competencies	Production approach brings job and skill idiosyncrasy which makes skill recognition problematic. Often dealt with by proxy measures eg. seniority.	External occupational norms and standards protect skill recognition & skill performance.
Re-negotiation	Primary focus on the firm unless it uses inter-firm job and skill classifications	Re-negotiating occupational norms necessarily involves many collective actors.
Need for workplace trust	To facilitate passing of firm-specific skills to new hires	To facilitate training of apprentices and acceptance of cost-sharing by trainees
Role of collective representation	Inter-firm classifications help to clarify criteria of skill/competence definition within the firm.	Secure observance of external professional / occupational norms
Collective action problems	Short-term adaptation at individual firms weakens shared inter-firm classification principles.	Short-term individual gains by free-riders undermine occupational market integrity

For the production approach, the externalities are less in evidence owing to the emphasis on adapting skills to firms' production or service technologies which greatly reduces the need for inter-firm cooperation. Nevertheless, it can assist firms operating the production approach, in very much the same way that it assists those using task-centred transaction rules. By adapting skills to the firm's technology rather than setting out from the logic of skill acquisition and formation, the production approach easily leads to idiosyncratic skills. As such, they are vulnerable to opportunism at job level, and can also prove very difficult to renegotiate. Inter-firm action, for example in establishing common principles of job classification, can ease these processes. The jobs themselves may still be shaped by the technologies used by individual firms, but the conditions for skill recognition, upgrading, and pay are

⁵ According to Ingrid Drexel, the chambers publish pass lists by local firms for different types of apprenticeship and these make transparent to all not only how many are being trained, but also how many to the appropriate pass standard.

shared with other firms. This facilitates action by outsiders in resolving disputes, and eases problems of renegotiation because individual jobs can be changed and redesigned without changing the general principles regulating them. If the principles themselves need changing, then the greater number of actors involved by working on an inter-firm basis increases the likelihood of negotiation in good faith: to adapt to changing market demands, rather than simply to take advantage of temporary weaknesses of the other party.

This kind of inter-firm action has a different focus from that for occupational skills. Given the greater influence of individual firms' technological demands on the content of skills, the classification systems will tend to focus on general criteria relating to all types of jobs in the firm rather than on regulating occupations. As such, the needs of the production approach are more easily accommodated by industrially or sectorally-based labour institutions whereas the those of the training approach are best supported by occupationally-based ones.

4.3 Combining the two contractual constraints: what institutional patterns?

If we combine the two contractual constraints, we can trace out the implications of the theory for the patterns of worker-employer representation, shown in Figure 5. The demands for strong workplace representation are greatest for the two function-based rules. In fact, strong workplace guarantees for workers would seem to be a necessary condition for the success of function-based rules, and under most circumstances, strong inter-firm coordination is necessary for the success of the training approach.⁶ Collective action is beneficial but not essential in the other cases. Thus, in large Japanese firms, which combine the function-based and production approaches, a very active form of enterprise unionism predominates. In large German firms, works councils play a key role dealing with a large number of job-related issues. French works councils provide an interesting counter-example. Using the task-centred work post rule, French firms have had a lesser need for close workplace cooperation. Also, for much of the post-war period, political competition among the unions and a weak membership base have meant that works councils have not been able to play the same role in France as in Germany. So, as Lorenz (1995) observes, French works councils have been more conflictual and less effective than their German counterparts.

Turning to the production versus the training approach, we can see that strong inter-firm representation exists in Germany and provides much support to its blue and white collar apprenticeship systems. Particularly important are the institutions that assist coordination among employers. Britain provides an interesting counter-example here. For decades it had a successful apprenticeship system and lively occupational markets, but their decline in the 1970s and 1980s owed much to the

⁶ Logically, the training approach can exist within a single firm, as appeared to be the case when the large industrial firms in Germany took over and modernised the apprenticeship system in the late nineteenth century. However, the model soon extended across firms.

weakness of the institutional framework on which they depended (Marsden 1995). Weakness of employer coordination led to greater reliance on task-centred rules to keep the system going. These were keenly defended by craft union organisation, albeit increasingly from special occupational sections within more general unions. These rules constrained many employers to train apprentices because they could not easily substitute other workers for apprentice-trained skilled workers. This proved a considerable economic handicap to the firms, and so their interest in apprenticeship declined, heralding its virtual collapse from the mid-1980s.

At first sight, the industrial pattern of German union organisation might also seem to be at odds with the argument. However, as Sengenberger (1987) has shown, a great many occupational skills covered by apprenticeship are specific to certain industries, particularly when one considers the very broad scope of industries and sectors in German union and employer organisation. Thus, although German unions are ‘industry’ unions in terms of their scope, unlike unions with similar coverage in other countries, they give a remarkable power to occupationally skilled workers whose special status is enshrined in classification and in wage agreements. The agreements are very specific on just how far workers without an apprenticeship may progress towards skilled status on the basis of on-the-job training. Again to compare with France, although German unions nominally have similar membership coverage to French industrial unions, they represent skilled workers in a completely different way, stressing occupational principles against the strong internal labour market logic to be found in France.

Finally, although inter-firm representation may not be essential to the workings of the production approach, there are good examples of how it can improve its flexibility. In France, where the work post system has wide currency, industry classification agreements have provided a framework for renegotiating skill norms in the enterprise (Eyraud et al., 1990). Likewise for Japan, Cole’s (1989) study of the spread of quality circles, as a result of coordinated action between firms, illustrates how such action can promote greater job flexibility. Although the movement was led by employers, Cole argues that it developed the momentum of a ‘mass movement’ as a result of informal coordination among firms which was not achieved in the US. In the final section, we turn to look at employment relationships in the weakly institutionalised environment of non-union firms.

Figure 5: The four types of transaction rule and patterns of worker-employer representation

Work place representation	Inter-firm representation	
	Weak	Strong
Weak	<i>Work post</i>	<i>Job territory rule</i>
Strong	<i>Competence rank</i>	<i>Qualification rule</i>

4.4 *The work post model and 'non-union' workplaces*

Because of its lesser need for collective action, the work post model is the one most likely to flourish in weakly institutionalised and non-union workplaces. There, the problems of asymmetric information, bounded rationality and partially divergent interests still need to be resolved, and transaction rules remain essential to the employment relationship.

The likely dominance of the work post system rests on two observations. First, one would expect the task-centred rules to be the type preferred by workers. These provide more clearly defined job responsibilities and work roles, and so enable workers more easily to identify potential pressures from their line managers to extend their jobs. It is also easier for workers to monitor performance management if work obligations are relatively codified. Function-centred rules are unlikely to appeal because employees' work obligations are too open-ended. Secondly, the absence of collective organisation among both employers and employees makes it less likely that stable occupational markets will emerge. This will push firms towards the production rather than the training approach. Taking these together, one would expect the work post type of rule to predominate. It is the one that best handles the problems of opportunism within the employment relationship in the absence of strong labour and employer institutions. Thus, the absence of a suitable collective framework would help explain the uneven development and slow diffusion in the US of the 'American models of high performance', and the persistence of Taylorist models of organisation there (Appelbaum and Batt, 1994, but also Katz and Darbishire 1999).

Like the other types of employment rule, the work post system can be administered with varying degrees of flexibility. It was argued earlier that collective action can facilitate flexible working, and most importantly, assist with re-negotiation of work organisation principles. In their absence, firms and workers still have to adjust to shifting markets, so what mechanisms are open to them?

First, one would expect employees to minimise their investments in the firm because these tie them and expose them to opportunistic re-negotiation by their employers. If they cannot afford to quit, then they are in a weak bargaining position. In the absence of collective bargaining, a worker's best protection is a job offer from a rival employer. As a result, one would expect workers to leave firms to shoulder a greater part of investments in skill development, and for firms therefore to privilege firm-specific skills.

Secondly, there are alternative, individual, routes to re-negotiating work assignments. For career workers, firms can link this to promotion, using it as an opportunity to alter work assignments, but they must also increase pay. Firms may also have to be more specific about promotion opportunities when they hire workers into such an environment because the latter are less likely to believe open-ended promises when the employer faces fewer checks and balances. In this respect, it is

significant that Baron et al. (1986) found that non-union firms had more structured job ladders than union ones.

Thirdly, firms can use the process of labour turnover to adjust work roles by individual negotiation, except that such negotiation occurs through the arrival of new hires. This can be important because careers provide incentives to only a small percentage of workers. According to Layard, Nickell and Jackman (1991: 222) nearly 30% of employees in the US had been hired during the previous year, as against about 20% in the UK and around 10% in France⁷. A year's figures provide only a rough indication, and one needs to remember too that the US economy also contains a significant proportion of long-term jobs. Nevertheless, it does suggest that heavy reliance on individual negotiation may lead to more rigid job assignments that in turn lead to shorter job tenures, and the associated recruitment and training costs for employers.

Finally, generalised individual re-negotiation of jobs may require the firm periodically to declare a 'state of emergency', for example associated with downsizing in response to bad stock market performance. However, this can prove a double-edged. As Bewley's (1999) recent study shows, even in the US, many employers are reluctant to announce job cuts because, although they may generate concessions, they may also cause employee morale to collapse.

5. Conclusion

To use Cole's expression, labour institutions are 'loosely coupled' with employment systems. The different types of transaction rules do place different requirements on the capacity of labour institutions to support them, and to handle the externalities associated with them, as shown in the previous section. Katz and Darbishire were impressed by what they saw as the increasing diversity of employment systems within established industrial relations frameworks at the national and sectoral levels. Thus, a first question is whether, and at what point, increased diversity, or a major change in the mix of employment systems in a given sector or economy would provoke a switch in the nature of higher-level labour institutions. This would also reveal how loosely coupled the two levels are in practice. A second question concerns the limits on the amount of diversity possible over the longer run.

Katz and Darbishire observe three general tendencies that could cause labour institutions to switch. The first concerns whether some firms might abandon function-centred rules and the training approach and so abandon the higher-level institutions associated with them. This is the question currently asked about Germany and Japan with regard to the encompassing nature of their employment systems. Should firms concentrate the flexible and high skill function-centred systems on those activities where their contribution to productivity is greatest? Do firms operating in Germany and Japan that produce only standardised products really need the sophisticated

⁷ The data relate to 1988 which was a period of low unemployment in between the peaks of 1982-83 and the early 1990s.

employment systems of those working on technically advanced goods and services? If they do not, should they then abandon these expensive systems which require large investments in training and in employment security, and opt for older style Taylorist patterns? If they were to do that, would they need to continue to work within the mainstream employer and union organisations, or could they even take the non-union path? Katz and Darbishire give evidence from both economies of a decline in unionisation, and a shrinkage of collective bargaining coverage. What we lack is good evidence at the micro-level on whether the hitherto dominant employment systems are also in retreat.

The second observation concerns the growth of cooperative industrial relations and 'social partnership'. The British TUC and some of its leading member unions are not alone among national union organisations to recognise the benefits of a partnership approach over their previous adversarial relations. There have been similar moves among leading French and Italian unions. In Britain, the collapse of the apprenticeship system in Britain has been associated with a shrinking of sections of the work force covered by job territory type rules. With that has come an increase in flexible deployment of labour across long established job boundaries, and a general erosion of occupational unionism, especially within private sector industry. Also in Britain, Katz and Darbishire highlight the growth in certain areas of function-centred work organisation, under the influence of close collaboration with Japanese firms and the arrival of Japanese multinationals in the automobile industry. Indeed, within that industry, one of the most striking changes has been at Rover where, in recent years, the development of more function-centred work organisation has gone hand in hand with policies to foster long-term employment and management-union partnership. In France too, firms have been trying hard to break from the work post system and introduce functional patterns of work organisation, but in the early days found it very difficult to achieve within the current framework of top-down and adversarial relations. Workers were simply too distrustful of management (Baraldi et al. 1995). It remains to be seen whether the current wave of working time agreements under the auspices of the Aubry laws will provide sufficient momentum to generate a shift in the pattern of union-employer relations that corresponds to the changes firms are seeking at the micro-level.

Their third observation, the growth of non-union employment relations, also raises questions about what is happening at the level of employment systems, and whether firms are opting for, or to remain with, work post systems. In Britain, many firms have shifted away from the training approach, with the decline of occupational skills, and towards the production approach. Despite talk of greater flexibility which sounds like a move to function-centred work organisation, there remains the strong possibility that they have remained with the task-centred rules, and have really moved to the work post system. The spread of non-unionism would reflect its low requirements for workplace trust, and its low demands on institutional support.

There is also a question as to the amount of diversity that is possible. Here, the theory of employment systems makes a strong prediction. There are four basic types

of transaction rule that will determine the shape of employment systems, and provided workers and firms wish to organise their relations within the employment contract, then they will face a fixed menu of options. This fact, plus the externalities mentioned in this article will generate large areas of uniformity as people seek to tackle problems in similar ways. The changes observed by Katz and Darbishire may not signal convergence, but rather, a continuously shifting pattern of dominance by different types of employment rule which will from time to time lead to a major reconfiguration of higher level institutions.

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