

Track 2. Changing Contours of the Employment Relationship and New Modes of Labor Regulation

The ‘Network economy’ and models of the employment contract: economic, legal and psychological

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1. Introduction.....	2
2. What is different about the ‘network economy’?.....	4
3. The standard employment relationship: incentives and sanctions for cooperation. ..	5
3.1 ‘Psychological contracts’	6
3.2 Economic ‘contracts’	8
a) Stable wages for employees and the presence of low trust.....	8
b) Deferred pay systems and fixed retirement as incentive systems.....	10
c) Identifying the limits of employees’ obligations in the open-ended employment relationship.....	12
3.3 Legal contracts	13
a) Moral hazard in an ‘incomplete’ contract.....	14
b) Re-negotiation.....	15
3.4 Articulation between the three kinds of ‘contracting’	16
4. Incentive problems in network employment	17
a) Problems of selection and skill recognition.....	17
b) Moral hazard in performance and product use.....	18
4.2 Incentive devices in project employment	19
a) Skills, job categories and competence standards	19
b) Social networks as checks on moral hazard.....	20
c) Functional equivalents of deferred pay in transient employment	21
4.3 Unions and representative institutions	22
5. Psychological, legal and economic contracts for the network economy	23
6. References	24
7. Endnotes.....	27

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Abstract:

The rise of the so-called ‘network economy’ and the development of project-based work pose a fundamental challenge to established methods of regulating the employment relationship. It is important from both a theoretical and a policy point of view to understand the nature of this challenge.

It is argued that the full development of the so-called ‘network economy’ depends upon establishing suitable forms of contracting between firms and workers. The classical employment relationship, open-ended as to both its content and its duration, came to assume near universality in the advanced industrial world during the twentieth century because it succeeded in aligning employees’ psychological expectations, performance incentives, and a supportive legal framework. This gave rise to a contractual form which has combined great flexibility and a good deal of enforceability: hence the popularity of the open-ended employment relationship, open-ended with respect to both its task content and its duration. The demand for more transient employment relations removes the platform of stability on which this was built, but the problems of achieving cooperation amid the scope for opportunistic behaviour remain.

The paper looks at the way in which the articulation of the psychological, economic, and legal aspects of the employment relationship. It argues for the need to explore more fully contractual forms used to regulate transient forms of economic collaboration, and bring these three aspects into alignment. Within this ‘biodiversity’ we may seek the methods with which workers and firms are experimenting as they seek forms of contract to provide a framework for more transient forms of collaboration.

1. Introduction

The full development of the so-called ‘network economy’ depends upon establishing suitable forms of contracting between firms and workers. The classical employment relationship, open-ended as to both its content and its duration, came to assume near universality in the advanced industrial world during the twentieth century because it succeeded in aligning employees’ psychological expectations, performance incentives, and a supportive legal framework. This gave rise to a contractual form which has combined great flexibility and a good deal of enforceability: hence the popularity of the open-ended employment relationship, open-ended with respect to both its task content and its duration. The rise of the so-called ‘network economy’ and the development of project-based work pose a fundamental challenge to established methods of regulating the employment relationship, and it is important from both a theoretical and a policy point of view to understand the nature of this challenge. This paper seeks to achieve this by reviewing psychological, economic, and legal aspects of the employment relationship, which for simplicity might be referred to as the

psychological, economic and legal 'contracts'. It argues for the need to explore more fully contractual forms used to regulate transient forms of economic collaboration. Within this 'biodiversity' we may seek the methods with which workers and firms are experimenting as they seek forms of contract to provide a framework for more transient forms of collaboration.

Most of the mechanisms we deem to reinforce flexibility within the employment relationship depend upon the presumption of a long-term relationship. The notion of the 'psychological contract' (eg. Rousseau, 1995) has attracted a great deal of interest in recent years. It addresses the need employers face to encourage their employees to use the discretion they have in their work for the firm's benefit. Because firms cannot rely on detailed specification of employees' work tasks, they rely on employees' goodwill and willingness to use their judgement. To develop this kind of constructive work behaviour among their employees, firms can build a 'psychological contract' under which employees and the firm expect positive work behaviours in exchange for the expectation of long-term employment, as far as the firm can provide this.

On the economic side, Williamson (1975, 1985) argues firms will provide long-term employment and internal labour markets as incentive systems to encourage workers to cooperate with management within a flexible employment relationship. He argues that in short-term relationships, they have little incentive to refrain from opportunistic behaviour, and that long-term employment means they will be with the firm for long enough to share the fruits of cooperative behaviour. Likewise, game theoretic approaches popular in the new Economics of Personnel stress the importance of 'tit-for-tat' solutions to providing cooperation within an employment relationship. However, Boyer and Orléan (1994) show that such games must be played many times over for cooperation to emerge, so the relationship needs to be of long duration.

The emphasis of much of labour law has been on establishing norms that can be enforced in a court of law or an employment tribunal. To be enforceable, legal norms need to be clear and easily identifiable by third parties, and if not, then it must be possible to show that clearly defined procedures have been followed, as for example, in the complex area of anti-discrimination legislation. Such norms can be enforced more easily in 'bureaucratic'¹ employment systems than in the more flexible ones associated with recent changes in many organisations. Collins (2001) shows that labour law does permit a degree of flexibility by admitting 'implied terms' in an employment relationship. To some extent these address the spirit rather than the letter of the contract, and highlight the need for mutual goodwill in an employment relationship. Collins (2001) shows that employment law has developed means of making promises enforceable within long-term employment relationships, protections against unfair dismissal on the one hand, and the means of enforcing unwritten 'implied terms' on the other. However, it has not been so successful in devising enforcement mechanisms for open-ended promises, such as 'training for employability' that might be made within more transient employment relationships.

The second part of the paper considers in more detail the requirements that 'modernised' employment contracts must satisfy if they are to be effective and adopted by workers and firms. Whatever one's views about the fundamental orientations of human behaviour, markets as social institutions encourage individual actors to pursue their own goals and maximise their own satisfactions. Given

conditions of bounded rationality, incomplete information and at least partially divergent interests, one can expect individual workers and firms to be alert to potential opportunistic behaviour by their business partners even if they are not that way inclined themselves. The various mechanisms just discussed associated with long-term employment are all, in one way or another, solutions to this kind of problem: how to engender cooperative behaviour in an environment where opportunistic behaviour is likely.

The third part of the paper examines a number of recent experiments in more flexible employment relations, and those alluded to in the 'network economy' to see how they handle these problems. It seeks to identify the ways in which these invoke different incentives and enforcement mechanisms compared with the classical open-ended employment relationship. More 'flexible' relations of shorter, or of time-limited, duration require alternative incentives to cooperation to those devised to function within long-term relationships. What kinds of incentives have firms in say the project-based employment common in media industries. If freelance workers are to be effectively 'self-employed', what alternatives are there to detailed contracts that specify all the services to be provided which would make the relationship very complex to administer and probably also very rigid ('is it in the contract?'). How is flexibility introduced without simultaneously re-introducing a new negotiation for each new set of operations to be carried out?

The paper concludes by arguing for a re-examination the fundamental principles of the employment relationship. This is vital for both labour law and collective bargaining, and indeed also, as the Supiot report (1999) showed, for our institutions of social insurance which have been built upon the classical form of the employment relationship.

2. What is different about the 'network economy'?

Sydow and Staber (2002) identify project organisation and project networks as key organisational features of the 'network economy' as it is developing in certain economic sectors, such as the media. With this sector in mind, Jones and Walsh (1997) characterised the career system of workers as comprising three elements: movement between employers; validation from the labour market rather than the employer, and use of extra-organisational networks and information. A project might comprise an advertising campaign, a film, a CD or a book for example, on which a temporary team of people might work, bringing together a mix of business management, technical and creative expertise.

Baumann (2002) argues that project production and small companies have flourished in the media industries because:

- Media products, especially fiction and entertainment, resemble fashion items with constant audience demand for novelty and innovation;
- There is a high element of one-off creation of new material (as in fashion) which is highly risky as the outcome (success) is uncertain;
- Once produced, the product is easily and cheaply reproduced (as contrasted with reproduction of models in such industries as autos where reproduction is highly capital and labour intensive);
- Dominance of one-off creation as opposed to continuous reproduction

Although these can be handled within large organisations, as was the case when large studios and large broadcasters dominated production, there are clear advantages to organising such activities by means of small firms and project teams. Indeed, although the initial impulse for dispersing production work in Britain and Germany owed much to their respective governments' competition programmes, it was not reversed when the immediate political pressures subsided.

The emphasis on one-off projects is not confined to the media sector. It has long been a feature of large-scale construction activities where each project is unique, and demands a unique mix of labour skills. In several countries, this feature is recognised in employment law (eg. Calan, 2001). Indeed, Calan argues this model should be extended to small and medium-sized firms that engage in large orders because employing labour for such 'projects' enables them better to cope with the risks involved. Project work and project networks have also figured largely in accounts of work and business organisation in 'Silicon Valley' (eg. Saxenian 1996, Scott 1998). Similar pressures prevail there as innovation often takes place around new projects set up to exploit a new idea. University research is also often organised on a project basis, as is university collaboration with private firms, for example on scientific ventures. In England, for example, there is a strong correlation between universities' scores in the national Research Assessment Exercise (RAE) and the percentage of non-tenured academic staff, with the top-rated Cambridge, London and Oxford Universities having 50% or more of their academic staff in fixed-term employment.² I

Several writers (eg. Cappelli 1999) have argued that the business environment has become more fluid and less predictable in recent years so that the offer of long-term employment has become more costly to firms. Commonly cited reasons include rapid technical change, the expansion of knowledge-intensive activities, greater competition and social change, all of which mean that employment models developing within sectors such as media and information technology are likely to be of interest to other sectors where similar may exist but in less severe forms. Especially in the latter sectors, the absence of a widely recognised contractual framework that all parties trust is likely to be a barrier to the development of more flexible patterns of economic organisation.

3. The standard employment relationship: incentives and sanctions for cooperation.

The employment relationship, as is widely recognised, is usually governed by an 'incomplete' and open-ended contract. It is incomplete in that the detail of the work to be accomplished by the employee is often stated in only the very broadest detail, and even where there are detailed job descriptions, there is usually an 'opening clause' stating that the employee should also undertake 'other such work as management prescribes'. It is also usually open-ended as to its duration. This form of relationship has proved immensely flexible and robust for both firms and workers, hence its continued wide popularity (see for example Auer and Cazes, 2000). These characteristics rest in no small part on the convergence between three elements that underpin it, which one might call, for simplicity, 'psychological', 'economic' and 'legal' contracts. This section reviews these three elements, and considers how the incentive structures and enforcement mechanisms on which they rest favour long-term employment, and fit uneasily with new patterns of project-based work.

3.1 'Psychological contracts'

The 'incompleteness' of the employment contract has attracted researchers in organisational studies and behaviour, which has been addressed through the lens of the 'psychological' contract. In some studies this is treated as an analytical device to understand how the incompleteness of the employment contract functions in practice. In others, it is treated as a thing which can be measured and tracked over time, monitoring the 'state of the psychological contract' (eg. Guest et al. 1996).

The most thorough analytical presentation of the concept has been given by Rousseau (1995). She summarises the psychological contract between A and B as comprising the following elements:

- Individual A's *belief* in:
 - *Reciprocal obligations* between A & B following
 - B's *prior promise* to the initial consideration of the exchange;
- Both B's promise and A's consideration are *subjective*
- A's belief in a psychological contract rests on a belief that B is acting in *good faith*, fairly, and in trust etc.

Rousseau's concept of the psychological contract, as summarised above, although framed in terms on subjective perceptions of obligations, contains references to a number of social conventions that transcend the individual relationship. Promising involves the social convention that one *ought* to keep one's promises. The obligations that arise from promises are more than mere expectations of probable outcomes. The same is true of acting in 'good faith', and 'fairly'.

Given its subjective nature, the solution as to what makes the 'psychological contract' stick is rather important. Rousseau contrasts it with 'normative' contracts (based on group norms, and which might be enforced by group action) and the implied terms of legal contracts, which might be enforced by legal means. The primary sanction lies in a drop in an employee's motivation, and in the threat of 'exit' (p.135). The quit threat is not a good sanction because at some point it has to be invoked if the other party is to continue to find it credible, and that will terminate the relationship. Motivation is subtle, and hard to measure, and the parties have to know each other well if this is to be a good signal in the relationship.

The use of social conventions, such as promising and acting in good faith are an important buttress to the efficacy of the actors' beliefs underlying the psychological contract. However, like learning the quality of signals such as changes in motivation, they also require duration in an employment relationship to be effective. Although promising is a social convention and bears the obligation that one *ought* to keep one's promises, one needs to know how sincerely one's partner makes a promise, and how far they are willing to go in order to deliver on a promise. One learns about the quality of such acts when the commitment is tested, which happens periodically, and so requires time. It is said, for example, that Japanese employees' confidence in the promise of lifetime employment was only consolidated when the large Japanese firms incurred great expense to avoid lay-offs during the first Oil Shock (Shirai and Shimada, 1978).

The importance of duration over time to sustaining the psychological contract is illustrated by Stone's (2001) comparison between the 'old' and the 'new'

psychological contract in the US (Figure 1). Rousseau refers to these as ‘mental models’ that workers have of their psychological contracts with their employers.³ Lack of detail about the precise content of an employer’s commitment could be resolved by applying certain benchmarks to the employer’s behaviour, for example on the provision of job security or promotions, and observing these over time. Under the ‘new’ psychological contract, the behavioural benchmarks are less clear, and the intended duration of the relationship is shorter, so there is less time to learn about one’s business partner’s behaviour.

Figure 1. ‘Old’ and ‘new’ psychological contracts

‘Old’ psychological contract	‘New’ psychological contract
Job security	Employability security
Firm-specific training	General/transferable training
Deskilling	Upskilling
Promotional opportunities	Networking opportunities
Command supervision	Micro-level job control
Pay and benefits linked to job tenure	Market-based pay
Collective bargaining and grievance arbitration	Dispute resolution procedures for individual fairness claims

Source: Stone K. (2001).

Group norms also play an important part in sustaining the subjective psychological contract, and can supplement the sanctions of exit and withdrawal of motivation. One of the most telling analyses of these, and their dynamics was that of workplace ‘custom and practice’ by Brown (1973). In his study, piecework pay rules and effort norms were mostly unwritten, and in many cases, were not consciously created. Instead, they were often the result of management acts of omission or commission. How did line managers resolve a particular pay or effort problem last time? Did it create a precedent? The shop stewards he interviewed saw themselves as the guardians of workplace custom, not as its initiators. Clearly, in an environment where much is unwritten and based on mutual understandings, as is the case with the employment relationship, what management did last time very easily creates a precedent for what management ought to do next time.

Although pay rules grew, as Brown observed, ‘like Topsy’, in fact, he also observed a number of processes that controlled it and which depend on long-term relationships. Notable among these were power relations among different work groups, and the need for all of them to maintain an alliance in the face of management, and at the same time, to maintain a good bargaining relationship with management. He gives one telling example in which one group wanted to press for a particularly favourable piecework payment, and they had good grounds in terms of precedent. However, the shop stewards’ committee urged them not to press their advantage because it would create inequity among the work groups and undermine their collective bargaining relationship with management. Such norms, and the work group relations that help to stabilise them and make them effective in the workplace, depend on stable employment relationships.

The norms of the ‘psychological contract’ are also sustained by critical guideposts as to whether the other party is honouring its part of the deal. External points of

reference, signs that the boundaries of expected practice have been crossed, are essential if third party support is to be mobilised, but they are also important at the individual level. These can be built into incentive systems, for example those built on the presumption of long-term employment, or the work rules that serve to delimit an employee's performance obligations. These have received a good deal of attention from economists, and are examined in the next section.

3.2 Economic 'contracts'

The employment relationship has evolved a number of mechanisms in order to:

- provide workers with a stable stream of income under uncertain conditions;
- provide firms with the flexibility to assign new and variable tasks to their employees;
- provide mechanisms to discourage opportunistic action by either party.

These mechanisms to provide incentives and to restrain opportunistic behaviour by either party are built on the presumption of an enduring employment relationship, and so give signals to employees that this is the employer's intention. They are also ill-adapted to providing incentives in transient employment relations.

a) Stable wages for employees and the presence of low trust

One of the prime concerns of workers, on account of their limited wealth and savings, is with a steady flow of income, and thus with a steady supply of work. The long-term employment relationship has provided just this: a relatively steady rate of pay in exchange for a steady supply of work, with the employer shouldering a major share of the risk stemming from product market fluctuations. Valuable to workers in itself, it also provides a platform for various incentive systems to sustain employees' work performance, particularly where time is needed in order to detect substandard performance.

The risk-sharing component of employment was taken up by a number of economists under the 'implicit contract' (eg. Stiglitz, 1984) and 'conventionalist' (eg Salais, 1989) theories which revolved around the insight that by providing a steady wage, the firm was offering workers implicit insurance against product market fluctuations. During good times, workers' output would exceed their wage, and this would be retained by the employer as a payment into the implicit insurance fund. During bad times, the employer would honour the implicit agreement and retain workers and maintain their level of wages (see Figure 2). One problem with this kind of contract is that firms cannot afford to provide both stable wages and guaranteed employment unless their markets are totally stable, in which case, the insurance would unnecessary. Hence, implicit contracts emerged that offer stable wages but with a risk of lay-off should business conditions deteriorate too far.

As a theory of voluntary unemployment, implicit contract theories may not have succeeded, but the essential insight into the dynamics of risk-sharing in long-term employment relationships is surely correct. One might ask whether risk averse employees would prefer variable pay with a correspondingly lower risk of lay-off rather than stable pay with a higher risk, and whether firms would not also prefer to provide this. The likely answer lies in the difficulty of enforcing contracts in which pay tracks the market value of workers' output. If the firm has best access to the

necessary information, then it is in a position to deceive workers about the true value of their output, and state that conditions are worse than they really are in order to gain a larger than necessary pay cut. To do so costs the firm little, and would increase profits. Even if their current employer were honest, many workers would suspect that the incentive to cheat is sufficiently strong for them not to want this kind of contract. Should this level of distrust by workers seem implausible, one has only to reflect on the large number of public sector employees who thought that management manipulated performance appraisals in order to save money on performance related pay (Marsden and French, 1998). In contrast, declaring that business conditions are bad enough to warrant to lay-offs means that the firm must also cut capacity and output which will have an effect on the volume of profits. Hence, the type of contract that best fits both parties is one containing a mix of a stable wage, which can be easily monitored by employees, and a risk of lay-off which is unpleasant for the worker, but also costly to the employer. Although this may be a second best solution for both parties, given conditions of mutual suspicion and the incentives to cheat, it emerges as the chosen contractual model because it is enforceable. Indeed, it is largely self-enforcing.

This may not be the only reason why firms offer stable wages. There may be administrative simplicity, and also a fear that if firms cut wages, their most marketable employees will leave, but they do complement the risk-sharing argument. Finally, one might ask why firms do not adopt sophisticated methods for monitoring company performance: why not adopt the 1993/94 Volkswagen model of work sharing combined with intensive monitoring of market conditions? The model did not appeal to other major employers in Germany, and was subsequently diluted and then scrapped by VW's management. One can speculate on the reasons for this, but it is clear that establishing sufficient trust between VW management, works councils and unions is even more demanding than the degree of trust needed to establish the 'implicit insurance' underpinning stable wages in the employment relationship. Such trust depends upon durable relations.

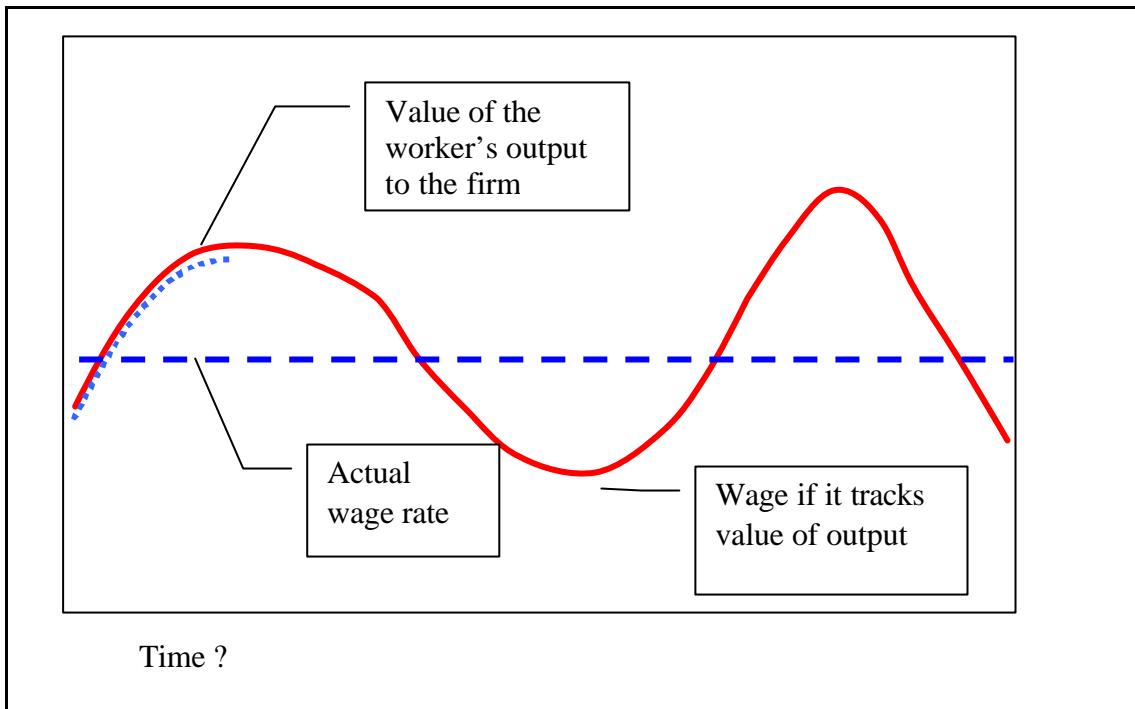


Figure 2. Stable wage and fluctuating value of employee output.

b) Deferred pay systems and fixed retirement as incentive systems.

Another very common feature of pay systems that is intimately associated with long-term employment is deferred pay. As Suzuki (1976) showed, earnings rise steeply with age in many industrial countries, particularly for white collar workers. Likewise, earnings rise with seniority in the firm in many countries, and although there is debate as to how far the observed relationship is also due to increased human capital or efficient job matches, for the present analysis, they all point in the same direction. Much human capital is built up on-the-job as work experience, and as such requires time. Attracting and selecting the right employee is expensive, so once a firm and a worker have found a good match, both parties will want to prolong the relationship.

Although the standard argument about deferred pay stresses its incentive function as opposed to its role in supporting on-the-job learning or encouraging expensively selected employees to stay, this is somewhat artificial in practice. The economic benefits and costs involved in each are somewhat imprecise, and they do not appear in company accounting systems, so it is unlikely that practitioners will distinguish between them most of the time. For this reason, I shall concentrate on the incentive argument.

One of the most influential statements of the incentive argument derives from Williamson (1975 and 1985). Given conditions of asymmetric information about the content of jobs and the skills required, and bounded rationality, workers have potentially a great deal of micro-bargaining power vis-à-vis their managers. Employers are better informed about other issues, but the important thing for a firm to be profitable is to prevent work organisation and work allocation becoming engulfed in an extensive process of micro-bargaining. If this occurs, then the employment relationship loses much of its flexibility, as Willman's (1986) case studies of micro-

bargaining illustrated in the British automobile, printing and dock industries. One way to avoid this is to give workers an interest in the long-term prosperity of business, which Williamson argued could be achieved by offering career structures and building an internal labour market.

The analysis of deferred pay systems owes much to Lazear (1990). Figure 3 illustrates a common system of deferred pay. Employees are initially hired with pay above their productivity while they learn the job. Their productivity then exceeds their pay for a period, which serves both to pay back the cost of training, and to build up an investment in the firm, on which they earn a return in their later careers when their pay exceeds their productivity. The firm gains considerable advantages from this, as it provides incentives to undertake training that the firm needs, to work flexibly and loyally for the firm's benefit, and it gives the firm a useful sanction in the event of persistent poor performance.

To work effectively, such pay arrangements need a clear date of termination. Once pay exceeds productivity, employees will want to prolong the relationship, and the firm may wish to curtail it. Firms usually like to lay off older workers because they lead to bigger salary-cost savings. Without a termination date, the conflicting interests would be likely to undermine cooperation, the key purpose of setting up long employment and deferred pay in the first place. The clear date gives a signal to both parties who can then easily detect backsliding by the other. It also gives a clear background to any subsequent renegotiation. If a firm wishes to use early retirements, the fixed retirement age gives it and its employees a clear benchmark against which to assess the sacrifice required of either party with the result that an orderly renegotiation can be achieved without undermining cooperation among other employees.

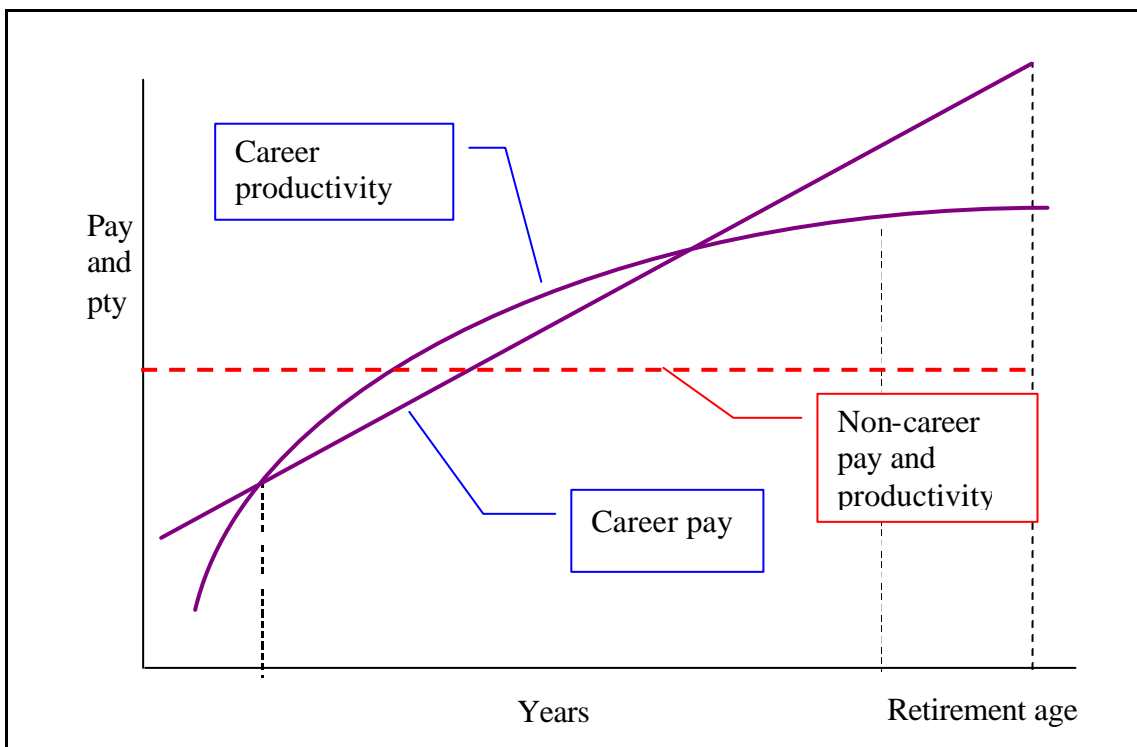


Figure 3. Deferred pay, productivity and retirement dates

c) Identifying the limits of employees' obligations in the open-ended employment relationship

A third area in the employment relationship where existing methods of regulation presuppose an enduring relationship concerns the mechanisms used to regulate the limits of employees' task obligations to their employers. Coase (1937) and Simon (1951) established the analytical case for regarding the employment relationship as a highly flexible contractual framework enabling employers to define the detail of their employees' work after they had been hired. For Coase, this reduced the transaction costs of repeated market negotiations to discover the relevant market prices, and for Simon, this enabled firms that face uncertain product demand to ensure that they had labour services available when they needed them. For a contractual form to be widely used, it has to satisfy both parties, and this means that the employee's obligations to obey management's instructions, although open-ended, cannot be unlimited.

It can be shown that the evolution of work rules of various kinds can provide both parties with the means of establishing the kind of work to which employees may be assigned and the limits of their task obligations. The same process of establishing limits for one party helps to establish minimum levels of cooperation that the other can expect. Reliance on work rules is important because, as Williamson (1975) showed, detailed inventories of tasks and detailed contingent claims contracts are not economically viable for the kind of work most employees undertake. Marsden (1999) identified four types or families of work rules that arose from combining two sets of constraints that a viable employment contract must satisfy: that they should be enforceable, and that they should relate workers' skills to employers' job demands (Figure 4). Enforceability can be tied to the attributes of individual tasks, or to functions within the work place, the former assigning work primarily at the individual level, and the latter, at the level of the groups responsible for particular functions. Aligning job demands and worker skills can be tackled either by taking job demands and given (the production approach), and forming skills in their image, as occurs often within enterprise internal labour markets; or by shaping jobs in the light of workers' skills (the training approach), the latter most commonly being of an occupational or professional nature.

Figure 4. The contractual constraints and common employment rules.

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

Source: Marsden (1999, Ch. 2)

These rules emerge from an evolutionary game process, although they can be reinforced and generalised by institutional action (eg. collective agreements, laws, or by consultants), and so, like the practices concerning stable wages or deferred pay, are not created at will by individual actors. To a large degree, their effectiveness depends

on their being well known and understood by those using them so that their outcomes are predictable, and known not just by those immediately involved, but also by potential third parties who may be called upon when disputes arise.

The rules associated with the 'production approach' are most clearly associated with longer term employment because of the need to mould workers' skills to whatever technology the employer is using. The greater the amount of skill needed, the longer the duration of the relationship needed for training and its amortisation. The need for duration is likely to be greater also with the 'function-centred' rules as these depend upon the dynamics of stable work groups which need to develop the practice of cooperative and flexible working among their members.

By virtue of its association with enterprise internal labour markets, the production approach and its work rules have been associated with stable employment (Doeringer and Piore, 1971). This is particularly so of the function-centred rules because of their dependence on stable work groups which facilitate smooth job rotation and joint learning. The main exception would be under the task-centred work systems at the less skilled end. Taylorist work systems proved their ability quickly to absorb large numbers of newly urbanised workers from the countryside, as well as immigrant workers who lacked factory skills during the long boom of the 1950s and 1960s. Job tenures were not always short, but the work system was able to provide the necessary skills and achieve desired levels of productivity from new workers relatively quickly. Labour statisticians would commonly define 'semi-skilled' workers as those whose jobs required between three and six months experience to reach full efficiency.

By focusing on workers skills, the training approach is less tied to long-term employment than is the production approach because the skills are external to the firm. Nevertheless, as will be discussed later, there important constraints especially if training for occupational skills requires a significant component of employer finance.

Without these work rules, it is questionable whether the employment relationship would have spread so widely because of the ambiguity relating to workers' task obligations within such an open-ended relationship. Yet it is clear that an important segment of them are tied to long-term employment, and would function poorly under transient employment relationships.

3.3 Legal contracts

The nature of the employment relationship as an open-ended agreement places it in a special position with regard to employment law. An 'incomplete contract' cannot be enforced by the courts in the normal way because its breach is not like that of other contracts where one can simply compare what was agreed and what has been delivered. Indeed, the employment relationship would lose its flexibility as an open-ended arrangement if either party could easily identify fulfilment and non-fulfilment. Rather, the law provides a framework within which cooperation can take place, and it functions primarily to control certain forms of opportunistic behaviour to which the relationship is exposed. Without these, the parties would very likely opt for more easily enforceable, but less flexible contractual frameworks. However, as will be argued in this section, the mechanisms by which employment law underpins the

employment relationship are adapted to long-term relationships and are much less adapted to more transient forms such as might prevail in project-based employment.

In recent decades, the debate among economic policy analysts on labour market regulation has tended to focus on the ‘constraining’ rather than the ‘enabling’ features of employment law. This was the sense of the OECD’s review of labour market regulation measures in its review (OECD 1999: Ch 2.). Commons (1924) makes the case for the enabling function of law powerfully in his ‘Legal Foundations of Capitalism’. There, he shows how legal recognition of certain economic concepts made it possible to write legally enforceable contracts. For example, legal recognition of the exchange value of ‘goodwill’ and of ‘non-corporeal capital’ opened the way for new forms of economic organisation, including much of the modern business enterprise, just as it also opened up new sources of taxation⁴. In the domain of employment, arguably the smaller economic stakes in individual transactions have meant that greater reliance could be placed upon collectively agreed rules than in other business areas. Nevertheless, the development of a suitable legal framework that was adapted to the risks inherent in the employment relationship gave it a considerable boost, as will be explained below.⁵

Within the employment relationship, the law supports cooperation by restraining a number of types of opportunistic behaviour thus enabling both parties to invest in the relationship with a greater degree of confidence. Workers may acquire firm-specific skills, relocate to be near their employer’s premises, build up goodwill with their employer and so on. The employer may invest also in the employee’s skills, and build the teams that underpin its organisational capabilities. These investments create sunk costs, and open up possibilities for two kinds of ‘hold-ups’. The first concerns the standard moral hazard problem whereby workers may provide less performance than they initially agreed, and on the other side, the employer seeks to extract more performance, or to pay less for it. The second concerns the problem of re-negotiation such as is periodically necessary in order to adapt to changing technical and market conditions. In both cases, the operation of the law presupposes and buttresses long-term employment.

a) Moral hazard in an ‘incomplete’ contract

A standard problem in principal-agent theory concerns how the principal can ensure that the agent provides a good standard of performance when the precise type of performance required cannot be specified in detail in advance, and when supervision is costly. If we assume each party is primarily self-interested and keen to maximise its net rewards (reward minus the cost of effort), then incentive theory indicates that rewards should be tied to output in some way. Moral hazard may occur as the agent provides less effort or less work quality than was intended at the time of hiring. Commons (1924) expresses the same idea very well when he argues that within the employment relationship, workers offer their ‘goodwill’ to their employer to apply their skills and talents within their jobs. Moral hazard would amount to reducing or withdrawing such ‘goodwill’ once the relationship had been established.

With an incomplete contract, one might ask how the law can help enforceability. The solution, as stressed by Collins (2001) under English law and by Stone (2001) for US law, lies in the concept of ‘implied terms’ – what was reasonably intended at the time of engagement. Implied terms require some kind of benchmark. In many

organisations, the use of job classifications provides workers, management and outside third parties with a guide as to the type of work and performance that can be expected from people hired into certain positions. 'Implied terms' and job classifications also give employees some protection against excessive or unreasonable work demands.

Employees from more vulnerable groups in the labour market might fear that, with an incomplete contract, their employers might take advantage of their greater difficulties to find alternative employment to drive them harder or reward them less. Anti-discrimination legislation gives some protection in this area, but again, job classification plays an important part in enabling the parties concerned, and the law, to identify cases of unfair treatment. With the US experience in mind, Sorensen (1994) shows how the application of equal worth provisions depends heavily upon job classifications. These depend on stable organisations.

b) Re-negotiation

Renegotiation of the terms of employment has to occur periodically within employment relationships in order to take account of evolving job demands, and evolving conditions of the organisation. As Teulings and Hartog (1998) point out this is a perilous time in employment relationships. The goal of the employment relationship was to substitute management coordination for the higgling of the market. This works well until changed conditions require re-negotiation, and then the problem is how to contain the amount of bargaining while adaptation to new conditions is sought. Because of the sunk costs of both parties in the relations, such re-negotiation is exposed to the risk of 'hold-ups' by either party as each has an incentive to make the most of such occasions to extract better terms from the other (Malcomson, 1997).

Major renegotiation often occurs during times of restructuring, such as when redundancies (dismissals for economic reasons) are being sought. Knowing that employees are concerned about the future of their skill and other investments they have made in their jobs, an employer could seek to exaggerate the extent of a downturn in order to impose worse terms than necessary on its employees. By means of collective bargaining, workers and firms have developed their own private means of resolving such issues so they can contain the risk of 'hold ups' by either side. Indeed, the precursors to much continental European legislation in this area can be found in such collective agreements as those in the Lorraine steel industry in the late 1960s (Reynaud, 1969). The law has helped generalise this approach to all sectors, including those where collective bargaining is much weaker.

On economic restructuring, employment law in many countries establishes provisions that help to limit the scope for hold-ups, and so can ease the change. Much continental European employment law has long established procedures by which firms may conduct the renegotiation that goes with restructuring. Under French and German law, for example, employer and employee representatives must agree a 'social plan' which details measures to minimise straight lay-offs, making full use of alternative measures where practical, and involving a considerable degree of consultation. In these countries, and in Britain, the law establishes certain minimum levels of financial compensation for employees losing their jobs. Both the procedural and the financial elements help to reduce the risk that redundancies are used simply to pressurise employees into conceding better terms to their employers.

Taken together, these kinds of legal protection help to reduce the risk of ‘hold-up’ within the employment relationship, and so reinforce its value as a contractual framework for both workers and their employers. However, all these provisions presuppose that employment is a long-term relationship. Redundancy compensation is proportionate to length of prior service, and much employment protection is subject to a time threshold before employees become eligible. Consultative procedures for agreeing a ‘social plan’ require a stable workforce. They fit well around a deal within which employees will work flexibly, within limits, for their employers, and that in return, there will be an expectation of reasonable work roles and reasonably stable employment. To echo Stone’s (2001) analysis, employment law is well-adapted to reinforcing the ‘old’ but not the ‘new’ psychological contract.

3.4 Articulation between the three kinds of ‘contracting’

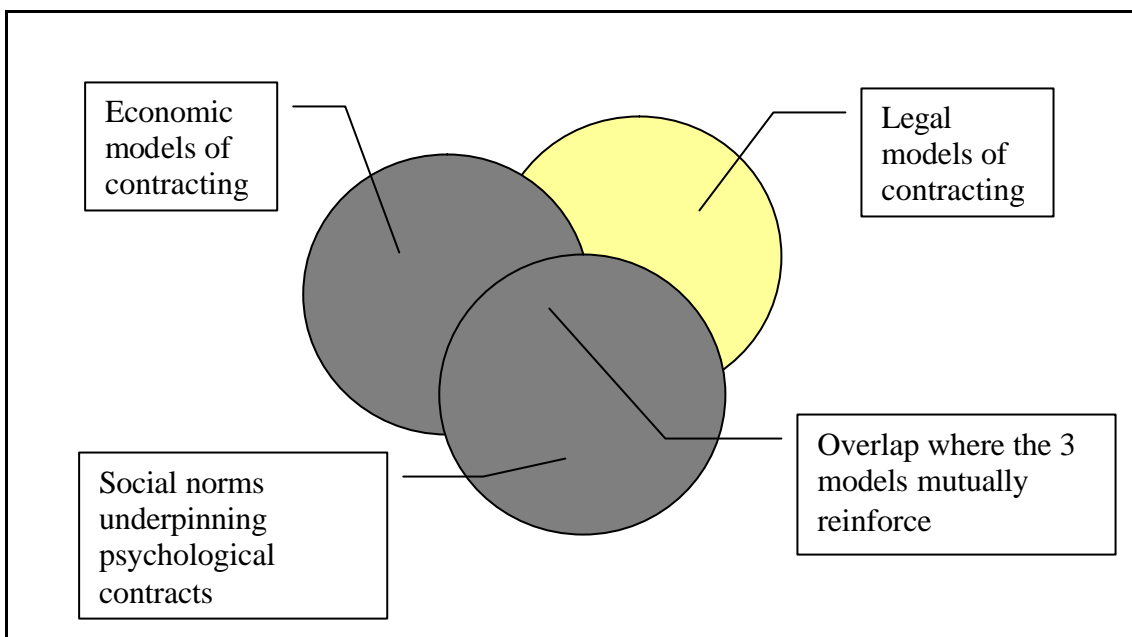
One may consider the three different approaches as focusing on complementary processes that underpin the employment relationship, and in this respect they can be mutually reinforcing, especially for the areas where they overlap (Figure 5).

What consolidates the position of the open-ended, long-duration employment contract currently is that it lies at the intersection between these three types of ‘contract’: psychological, economic and legal. This gives it great stability as a social institution, and great predictability for the employers and workers who adopt it as the contractual frame for their relationship. For the long-term relationship, all three elements provide compatible incentives and enforcement mechanisms.

The reason it is particularly difficult to adapt these to underpin more transient employment relations is that they are mutually supporting and have evolved jointly. An illustration of this can be seen in both Commons’ (1924) and Supiot’s (1994) accounts of the emergence of key legal concepts underpinning the employment relationship. The legal system’s first response to newly emerging economic relationships was to seek to apply established legal principles, and then gradually to adapt them. As Supiot put it, contracts originally related to exchanges of property and the human element of labour never quite fitted. Gradually the practice emerged of integrating a special status and special rights for workers into the contract: ‘englober un statut dans un contrat’. This is because systems of laws need internal consistency if they are to command the respect and confidence of citizens.

On the economic side also, there is evidence from experimental economics (eg Fehr et al, 1998) that there is some mutual adaptation between ‘psychological’ and ‘incentive’ contracts. For example, it appears that economic actors are more likely to play the cooperative strategy and reciprocate cooperation than is supposed under strict applications of rational choice to prisoner dilemma models. A first consequence is that cooperation may be less fragile, less placed on a knife-edge, than is conventionally supposed. Positive reciprocity may be learned behaviour, or it may depend on one’s knowledge of supporting institutions. Such evidence is consistent with the of Bewley (1999) and of Kahnemann, Knetsch and Thaler (1986) on fairness behaviour in economic transactions.

Figure 5. Articulation between these three different kinds of ‘contract’



4. Incentive problems in network employment

With the rise of project-based employment many of the older problems of incentives and moral hazard remain, although they appear in different forms. At the same time, many of the incentives and protections against opportunistic behaviour within long-term employment are absent, and require the development of functional equivalents. In this section, I concentrate on the problems of selection and skills, and on moral hazard in performance and use of the product, and then examine some of the mechanisms that help resolve these within project-based employment.

a) Problems of selection and skill recognition

A difficult problem in managing project teams is the selection of new collaborators. Under long-term employment, firms could always use probationary periods, and careers as screening devices, and new employees could be assigned to progressively more sensitive tasks. Although the shorter duration of project employment may eliminate the long-term danger of adverse selection in recruitment, the cost of entrusting important tasks to little-known collaborators could be more immediate in terms of the current project's success. To be associated with a high profile project could be beneficial to potential collaborators, and the effect of their unsuitability on the final product could be masked by compensating efforts by other team members.

A second class of problems concerns the incentives to invest in skills. Typically, skill formation is a long-term process. Craft apprenticeships and professional training commonly lasts three or more years, and even conventional on-the-job training for semi-skilled work may last between three and six months. In contrast, the duration of project-based work may be considerably shorter. What incentive is there then for the project coordinator to provide training if there is considerable uncertainty as to whether the trainee will remain for long enough for the training to bear fruit. On the

other side, the project may well terminate before the training, so that the collaborator has only a half-completed skill. With project employment, one would expect skills should be transferable, otherwise there is no incentive to train. The pay-back period is too short. Yet, the cost-sharing mechanisms that Becker (1975) envisaged can work only imperfectly. Trainees may be unwilling to bear the cost because of the high risk that their training will remain incomplete. If a certain 'stickiness' reduced labour turnover and enabled orthodox firms to bear some of the cost, this would seem to be absent with project-based employment. It is possible that such difficulties have been masked in the media industries studied because of the historical importance of large studios or broadcasters which provided a stock of skills on which project employment could grow. In a recent comparative study of training in the British and German media industries, Baumann (2002) observed that training was indeed problematic in small and project-based organisation for just this kind of reason.

b) Moral hazard in performance and product use

Under the long-term employment relationship, the 'moral hazard' problem revolves around whether the employee will deliver the quality and quantity of work agreed, and whether the employer will seek to gain more and to pay less. As stressed earlier, the resulting tensions were resolved within the incentive structures of a long-term relationship. For more routine types of work, short-term employment could be managed by intensive supervision and thus some problems of moral hazard would be kept in check.

A common feature of project-based work is that it resembles small batch or customer-centred production so that intensive supervision, which can work for routinised jobs, is not a feasible option. With project-based employment, there is a stronger focus on the final output, and each team member's contribution to that. Substandard performance may not be detected until after the project is complete and the team disbanded. Likewise, abuse of the product by the coordinator may not become apparent until afterwards, when the collaborators can no longer easily apply sanctions. Under the first heading, collaborators may want to hold back their best or most creative ideas and use them to gain a position in a future project. They may also pick up ideas from others during the collaboration, and wish to exploit them themselves later on.

On the collaborator's side, because their reputation and their ability to get future work may depend on the outcome of their current project, they may be concerned about the use to which it is put, as some of these may damage their reputation. There may be conflicts too as to the relative contribution of creative ideas and management to a project's success.⁶ It may be the commercial interest of the owner of the product to maximise the revenues from sales and related promotions. In contrast, creative workers' reputation may be more enhanced by a quality product even if it appeals less widely. These concerns were brought out clearly in a study of Hollywood by Paul and Kleingartner (1994), particularly over the treatment of the 'product' once work on it was complete.

They highlighted a number of conflicting interests over use of media artists' creative works:

- 'additional use' of work once project complete;

- control of the product (especially where reputation is critical for future work) writers' contracts can specify exactly what will be written (treatment, screenplay, etc) and how producer may use it;
- creative workers' interest in maintaining future value of work by avoiding 'over-exposure' and producers' interest in maximising income for project via additional;

4.2 Incentive devices in project employment

Incentive devices and checks on opportunism have to operate in different ways within project-based employment. The first to be examined concern social networks which play a key part in resolving performance problems because they serve at once as bearers of a worker's reputation and as a source for finding new work.

a) Skills, job categories and competence standards

The networks underpinning project-based organisation are sometimes referred to as 'occupational communities' which share a common background education and training, and a set of interrelated competencies.

Members of an occupational community share a common concern about the integrity and quality of their skills as this affects their future livelihoods. If we follow Becker's (1975) analysis of the distribution of costs of general or transferable training, then we expect trainees to bear much or all of the cost because employers cannot prevent those who have been trained from taking their skills elsewhere. Thus workers in these circumstances have to invest heavily in their own skills, and this shared investment provides a foundation for an occupational community. Although some economists, such as Stevens (1998) have contested Becker's analysis on the ground that there are sufficient frictions in many skilled labour markets for employers to be willing to fund general training, these are likely to be low in project-based work.

This was indeed Baumann's (2002) conclusion from his study of the media industries in Britain and Germany. Although key skilled workers often had small teams of co-workers they would bring with them onto projects (p.55), as often happened under the industrial subcontracting systems of the nineteenth and early twentieth centuries, such teams are often not stable or large enough to provide a basis for such training as formal apprenticeships. As a result, it appears that much training is acquired informally on the job, and will not therefore be codified. As the BFI (1997) study noted, there is large proportion of young workers in the media sector who work very long hours on low pay, largely as a means of gaining access to subsequent employment. The large dispersion of earnings within the media sector (the BFI reported roughly 7:1 for the top to the bottom decile in 1996). This is an indication that many of those on low earnings are aspiring members of the occupational community, paying for their experience and access by long hours on low pay. There is a parallel with the long hours and low pay of aspiring members of professional partnerships, the long hours being at once a screening mechanism and a means of paying for job experience (Landers et al. 1996).

Baumann (2002) found that German employers were more successful than their British opposite numbers in establishing collaborative training institutions, and did establish a small number of apprenticeship schemes for key media skills, although

they were less successful than in other sectors in Germany, and the skills, and the job categories to which they were tied, followed technology-related tasks rather than a broader-based functional approach to work design.⁷ Thus, it seems that many of the production firms are too small and themselves too transient to provide a stable basis for formal occupational training schemes, such as apprenticeships. Hence the mix one observes in Britain of training schools, government-led coordination and lots of informal on-the-job training, but spread across work spells with successive employers. Because so much of the latter is not codified, many workers' economic success depends upon reputation that is conveyed by word-of-mouth and personal contacts (again the BFI studies for Britain, and Baumann for Germany testify to the importance of personal contacts for finding work in the sector). Several studies have noted the importance of informal networks in such activities (Carnoy et al. 1997).

Thus, occupational communities appear to play a key role in recognising informally acquired skills, they underpin the networks of contacts for getting work, and they share a common interest in the overall reputation for quality that their skills can command, even though they are often acquired informally.

b) Social networks as checks on moral hazard

Compared with long-term employment, project working has to rely on alternative selection and monitoring devices that lie outside the organisation. Membership of a particular network helps to direct who receives job information and who applies for jobs. Poor performance by workers and disloyal behaviour by project coordinators will eventually damage a person's reputation within the network, and in the long-run damage their ability to find new work and collaborators for new projects.

Reputation functions in two ways: as information about past, and hence likely future behaviour; and as an indication of one's commitment to certain occupational norms or standards. There has been much emphasis on the first, but the social and professional groups that support networks also bear the norms of correct behaviour. For example, craft and professional norms of pride in one's work guide both parties as to the level and quality of performance that can be expected (Scullion and Edwards, 1988). As acceptance of group norms usually accompanies group membership, the latter can be used as a guide to the former. It is also against this standard that both parties can negotiate a mutually satisfactory price for the work at the outset, and it is against this standard that the parties can judge whether the other has delivered.

Professional networks are less institutionalised than occupational labour markets of apprentice-trained craftsmen who have all been trained by the same route, and may share membership of the same craft or professional union. Nevertheless, there is still a sense in which they bear a collective reputation such that one member's poor performance damages the collective reputation for good performance. This means that obligation to provide good performance relates both to the current employer and to one's peers in the network.⁸

Rousseau distinguishes between subjectively based psychological contracts and group-based normative contracts. It is clear from the above that such networks can support what she calls 'normative contracts', but it is likely also that they shape also the individual subjective expectations that form part of the psychological contract. If

this is so, then it follows that with project employment, the psychological contract has two dimensions: one with the project coordinator, and one with the network in which it is embedded. Such dual commitments are not substitutes, and may well complement each other, as often does the dual commitment to one's employer and to one's trade union or professional organisation (Guest and Dewe, 1991).

Because the network plays such an important part in determining the incentive structures in the operation in project work, one would expect organisations to seek to marry both dimensions of the psychological contract, mobilising professional and social norms to help sustain performance standards in work. People are hired to do a 'professional job', and a job worthy of those who recommended them.

c) Functional equivalents of deferred pay in transient employment

One big question concerning particularly the more creative side of media work concerns who appropriates the economic return from its successful exploitation. This can be handled in part by reward systems, and by union representation, and suitable incentives may help resolve the tension between sharing one's good ideas on the current project or keeping them back for the next one: a tension observed by the BFI (1997) study of employment in the British film industry. The BFI survey also highlighted disputes concerning the relative value of creative and commercial skills in project work, the firms often arguing that ideas are plentiful and cheap, and that what counts is their successful implementation.

Two functional equivalents of 'deferred salary' have achieved some notoriety in sectors with a high degree of transient employment, although their coverage of workers in the sectors is far from universal. The first concerns royalty-type incomes, and the second, various forms of employee share ownership, such as stock options. In their study of Hollywood after the break-up of the big media production houses, Paul and Kleingartner (1994) found that 'residual incomes' make up about 45% of total earnings for member of the Screen Actors' Guild. These were analogous to royalty incomes derived from additional commercial exploitation of an artistic work, for example, for example, use of Disney film logos in marketing children's merchandise. Such payments helped to smooth actors' incomes in between jobs, especially important given the uncertainty about the timing of future work. However, it also provides an important incentive because the film's success will determine its usefulness for marketing other products, and hence the flow of residual incomes. Thus media workers can have an incentive to share their most creative ideas because they stand to share the additional income stream that will follow.

Stock options, which have been very popular in Silicon Valley, provide another form of deferred income (Sesil et al 2002). Like the royalty-type payments, stock options can be seen as an attempt to devise incentives to motivate workers to perform well while working in transient employment relationships. The value of an employee's output may not become apparent until after the relationship has ended so the employer has few punitive sanctions at its disposal. In so far as the value of the employee's contribution is reflected in the company's value, then a stock option provides a way of linking her future wealth to the quality of her current work input.

Although often discussed with reference to CEO pay, stock options have also spread among other employees. Sesil et al (2002) cite current estimates of use of 'broad-based' schemes in 'new economy' activities in the US as involving 30-40% of all firms, with a sizeable additional percentage of firms considering their adoption. Subject to some important reservations, Sesil et al. (2002) find that use of broad-based stock options was associated with higher productivity, but not of faster knowledge creation (as measured by patents).

Looking more widely, there are signs that the spread of performance related pay has been associated with more transient employment: as a substitute for promotional incentives and commitment mechanisms based on the implicit promise of long-term employment. Because it is able to operate over a much shorter time span, it can be integrated into more transient employment relationships. It can also enable management to dispense with a number of rules concerning pay allocation because the appraisals on which it is often based enable management to consider a range of types of performance they wish to encourage. This can be illustrated by considering briefly how its use may foster more flexible patterns of hours of work compared with traditional overtime systems.

In Britain and the US, it had been customary to pay many workers a standard rate for 'normal' hours, and an overtime rate for additional hours when the employer needed them. This was a very simple and clear rule that all could observe, giving employers some flexibility over labour supply, but also protecting workers from unilateral pressures to lever up working time. For managerial workers, in contrast, hours flexibility was often gained in exchange for promotion opportunities and built on organisational commitment. With the shift to more flexible work organisation and more transient employment relations, both of these mechanisms have been undermined. In place of the dual rates of normal and overtime pay, management can substitute a rate with performance pay and one without it. If willingness to work hours flexibly is a criterion of good appraisal, then the performance pay system can be used as an alternative incentive device to the older system of normal and overtime pay. In the place of extra hours, one could of course read any number of dimensions of work performance that management wishes to encourage and reward.

Operation of such flexible systems does require some equivalent check on possible opportunism by management, for example, because of its control of performance criteria and performance evaluations. This is dealt with in the next section.

4.3 Unions and representative institutions

Representative institutions, such as unions or professional organisations, and employer organisations take on a different role in sectors with more transient employment relations. Networks often need an institutional basis if they are to function effectively in employment.

In Paul and Kleingartner's study, the Screen Actors' Guild played a key role in the negotiation of artists' contracts and in keeping track of residual payments. This naturally placed them at the nerve centre of social networks in that sector. At a very minimum, they needed to maintain an up-to-date list of addresses and members' financial details. In Silicon Valley, Saxenian (1996) and Tolbert (1996) for example,

stress the key role played by major research universities which vet the reputations of the professors they employ, and filter the students they select. University positions also provide professors engaged in commercial research projects with an independent career structure and stable employment. Like the unions in Hollywood, these provide an essential anchor for social networks, and help to certify the job and reputational information they convey.

With other types of pay system for more transient employment, such as performance pay, some form of independent employee representation, such as unions, may have a critical function to play. Collins (2001) suggested that employers need to be able to make credible promises to their employees if they are to get them to agree to work in certain ways. This can apply to employability training, the example he chose, but it can also apply to the operation of more flexible pay systems. The example of flexible hours of work rewarded by performance pay is a similar case. It is unlikely to be accepted by employees unless they have some confidence that management will honour its commitment to reward such flexibility. Here too independent employee representation can play a key part in helping to ensure such schemes are fairly operated: that there is procedural justice (Marsden, 2001).

5. Psychological, legal and economic contracts for the network economy

This paper has traced out the safeguards and incentives against opportunistic behaviour that underpin cooperation within flexible, long-term employment relationships. The problems of potential opportunism remain with project-based employment, but the safeguards for the moment are only weakly developed. Unless we see the development of functional equivalents of the safeguards that underpin the mainstream employment relationship, it is likely that further development of project-based employment will be restricted.

The development of institutional arrangements to support project-based employment is complicated by the need to achieve convergence between the processes underlying the three concepts of 'psychological', 'economic' and 'legal' employment contracts. Each represents an important part of the total problem. Arguably, the success of the standard employment relationship as a contractual form owes much to the convergence between these three different types of process, so that each supported the other two.

It is hard to predict a priori what contractual forms will emerge to regulate project-based employment, but the diversity of models that have been developed spontaneously by the actors most closely involved provides a number of clues. These can arise on an experimental basis, and only then can the actors begin to assess whether these forms provide the right kinds of incentives and protections against likely forms of opportunistic behaviour. Of key importance in this respect would seem to be mechanisms that extend incentives beyond the current employment relationship or project, and hence the importance of the social networks, and of forms of reward system that provide a measure of participation in future revenues associated with individual projects.

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7. Endnotes

¹ The term 'bureaucratic' is used in the sense of Jacoby (1993) which he used to denote the established employment systems of the post-war US and Japan, based on long-term open-ended employment.

² These figures were extracted from the university performance league tables for 2000, published by the Times Higher Education Supplement in its issue of 14.4.2000. The median percentage of non-permanent staff across Britain's 97 universities was about 40%. Overall, there is a correlation of 0.77 between university research ratings in the national Research Assessment Exercise and the percentage of non-permanent staff. The RAE is one measure of success in the competition for research funds, and it also serves as a quality index in the search to attract overseas students.

³ Piore referred to similar processes underpinning internal labour markets whereby workers developed a sort of mental model of the job, seniority and workplace custom.

⁴ The judgements he considers relate to whether the state should uphold the right of citizens to redress for loss of potential income rather than just loss of physical assets. In the 1872 case, the State of Louisiana had granted a corporation a monopoly to maintain the slaughterhouses in New Orleans, and regulated the charges made to other butchers. The latter contested the law on the grounds that it deprived them of their property without due process of law, a right established under the Fourteenth Amendment. The case hinged on whether 'property' meant physical assets, use value, which they had not lost, or whether it covered the exercise of their trade, exchange value, of which they argued they were deprived. In that case, the Supreme Court ruled by majority in favour of the older notion of property. However, by 1897, in the *Allegeyer* case, the Supreme Court recognised property as exchange value, including liberty of access to markets.

⁵ In fact, Commons devotes considerable space to arguing how the employment relationship should be understood as an exchange of goodwill, and how the recognition of non-corporeal capital also covered workers' ability to earn a living from their skills: both essentials elements of 'at will' employment. This was workers' 'earning power'. A restraint of trade, such as a restrictive covenant limiting where they can work in the future, could deprive them of the earning power of their skills even though it did not remove their 'use value'. Although 'at will' employment is often associated with the employer's right to hire and fire at will, the employee likewise remains in the relationship 'at will'

⁶ In a number of interviews carried out in the BFI (1997) study, it appeared that several project coordinators (production company managers) thought that ideas were less important than the way they were put into operation. Good ideas were plentiful and cheap, but translating them into a successful programme was expensive.

⁷ Baumann found that project organisation undermined the traditional apprenticeship system in the German film industry because freelancers had no employer to pay the cost of training, so there evolved a form of 'dependent' joint supply whereby the public authorities funded the Cologne International Film School (p. 196). Thus Germany now has a diversity of joint supply solutions: Two apprenticeship schemes for production crafts: Media designer and Media editor, which work because a sufficient number of firms are involved and can pool resources; and Local initiatives (eg. Cologne International Film School). The Media designer role spans three production departments and has been fairly successful, whereas the Media Editor has been more specialised and benefited less from firms' collaboration in training, and was undermined by freelance work (too specialised for a fluctuating market with lots of freelance workers).

⁸ This is an old idea. Albert Rees (1966) noted this in labour market networks for recruitment when employers use kinship and friendship networks as recruitment channels.