THE DYNAMICS OF A VARIABLY COUPLED SOCIAL SYSTEM:

THE CASE OF THE COMPAGNONS DU DEVOIR

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Submitted for consideration for publication as

“non-traditional research”

at the

Journal of Management Inquiry
THE DYNAMICS OF A VARIABLY COUPLED SOCIAL SYSTEM:

THE INTERNATIONALIZATION OF THE COMPAGNONS DU DEVOIR

Abstract

This paper aims to expand the use of the coupling metaphor in organizational analysis by introducing a conceptual link between coupling and systems closure. We present a case study of Les Compagnons du Devoir (CdD), an ancient French Compagnonnage, or workers’ brotherhood. This organization has managed to survive for at least 700 years; it is believed to be the oldest extant form of labour organization.

We analyse the CdD as a highly institutionalised system displaying variable couplings and facing significant changes in its socio-cultural environment. These features have been highlighted by recent attempts to internationalise the CdD. We distinguish between induced change and change by erosion, and discuss how, given certain coupling configurations, an organization has persisted in an almost unchanged state, while the world around them evolves.

KEY WORDS

Coupling, Internationalisation, Institutional change, Les Compagnons du Devoir, Social Systems.
The Dynamics Of A Variably Coupled Social System: The Internationalization Of The Compagnons Du Devoir

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INTRODUCTION

This paper aims to extend and refine one of the most potentially fruitful concepts to emerge in organization theory in recent years: organizational coupling (Beekun and Glick, 2002; Dubois and Gadde, 2002; Orton and Weick, 1990). The coupling metaphor has the potential to transform our views on organizational development, since coupling – and the related concept of systems closure - can help us to conceptualise the processes involved in organizational change and adaptation. We apply the key ideas of inter-, intra- and extra-organizational coupling to a case study of a French Compagnonnage, Les Compagnons du Devoir (CdD). We use the metaphor of loose and tight coupling to explain organizational stability in the case of an antique labour organization which can trace its history back to the fifteenth century. We use these conceptual tools to illustrate how, given certain coupling mechanisms, linked with organizational closure, organizations can persist in an almost unchanged state, while the world around them evolves. We analyse the theoretical issues using the case of the CdD at a time when it was contemplating internationalization by enlarging its activities beyond France, and into Great Britain.

1 The authors appreciate the helpful comments and support of the Associate Editor Professor Michael Pratt, three anonymous reviewers, and participants at the Academy of Management Annual Meeting 2007 on prior versions of this article.

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The paper opens with a brief literature review of the coupled system in organization theory. We draw attention to the restrictive nature of the use of a coupling metaphor to date, stressing the need to understand the dynamics of coupled systems and coupling as a continuum rather than as a discrete category, and looking at tight, as much as at loose couplings. The article then proceeds to a case study of the CdD in which we outline our methodology and findings. We analyse it as a highly institutionalised system displaying variable couplings, and facing significant changes in its socio-cultural environment and institutional grounding. This analytical framework permits a better understanding of the dynamic of organizational systems and thus of problems of change and stability in organizations.

SYSTEMS COUPLING IN ORGANIZATION THEORY

We conceive of the CdD as an evolving social system. A social system comprises elements and links between those elements. These elements can be heterogeneous; that is, they have different characteristics in terms of the resources they exchange with the overall system. The links between the elements create interdependencies between them, and also between the overall system and its environment. A social system then is one whose elements are actors (individuals or groups) and whose links are frequently non-tangible (information, sentiment, institutionalised practices.) A further characteristic of a social system is that its actors try to mark off their activities inside the system from those outside in an attempt to reduce uncertainty (Luhmann, 2001). Using the ideas of d’Iribane (1994) and Kallinkos (2003) on organizational culture and the relation of the individual to work, we try to understand the relationship between the different organizational elements that make up the CdD, and the relation of the CdD with its larger socio-cultural environment.
The idea of coupling, both between and within organizations, first gained popularity in research on educational institutions (Weick, 1976; March and Olsen, 1976) and was later extended to systems theory within organization studies (Orton and Weick, 1990). However, the focus in literature has so far been almost exclusively on *loosely* coupled systems. Weick (1976) suggests a non-teleological stand in organizational analysis by pointing out that often, it is a pattern of couplings that produces an outcome. Further, there is an interrelation of coupling where change in, and of, a coupling impacts other couplings (Weick, 1976).

According to Orton and Weick (1990), the coupling perspective encourages researchers simultaneously to consider the interdependence and indeterminacy in the interaction of organizational elements. In their study on couplings in the construction industry, and basing themselves on Orton and Weick (1990), Dubois and Gadde (2002) note that that “loose coupling may occur in a number of dimensions: among individuals, among subunits, among organizations, between hierarchical levels, between organizations and environments, among ideas, between activities, and between intentions and actions” (p.623). They also observe that it is the *pattern* of loose and tight couplings that define an organization’s means of coping with uncertainty. In their study on organization structure from a loose coupling perspective, Beekun and Glick (2002) aim to understand relational patterns in an organization along the categories of its elements, four key dimensions (strength, directness, consistency, dependence), two co-ordinating mechanism (differentiation, integration) and domain.

Spender and Grevesen (1999) consider a multinational corporation as a loosely coupled system, and they provide an interesting juxtaposition of local responsiveness and global integration, with high global integration being a proxy for tight internal coupling. In common with other authors, they propose that loose coupling from the environment can help a firm
buffer itself from immediate and sometimes haphazard changes in that environment. On the other hand loose coupling can create blockages against interventions in local decision making, and the diffusion of knowledge (Weick, 1976; Dubois and Gadde, 2002). Loose coupling can be considered a form of organizational slack (Staber and Sydow, 2002), an advantage in hypercompetitive environments.

**Extending The Coupling Metaphor**

Loose coupling is presented as an organization’s way to deal with uncertainty stemming from unpredictability and interdependence (Beekun and Glick, 2002; Dubois and Gadde, 2002; Weick, 1976). It therefore follows from this that when coupling and system closure occur in intense forms they can act together to seal off the organization from its environment thus reducing or avoiding uncertainty altogether.

Loose coupling is “a situation in which elements are responsive, but retain evidence of separateness and identity” (Weick, 1976). We wish to go beyond the notion of “situation” and the almost exclusive consideration of loose couplings only. The coupling metaphor has mostly been used statically, to describe and analyse organizations in snapshots. We hope to show that extending the coupling metaphor to include intra- and extra-organizational couplings; and variable degrees of couplings, can shed light on the organizational dynamics of adaptation and resistance to the environment. We use the coupling metaphor in an extended way. We propose to examine the development of an organizational system by observing both intra- and extra-organizational couplings; the relationship between coupling and relative system closure; and both loose and tight couplings.
In order to understand a system in a holistic way attention must be paid to links - and therefore couplings - at all levels. A useful way to identify key couplings is to use the distinction between “actor bonds”, “resource ties”, and “activity links” proposed by Håkansson and Snehota (1995), who introduce these categories as the “three substantive layers of a relationship”. Activity links between partners are those of a technical, commercial, or administrative nature. They can be sequential or parallel; and they create, and serve to manage, interdependencies between partners. Resource ties can be tangible or intangible; they can be acquired, accessed, or combined. They create interdependencies between partners, which constrain and shape opportunities for interaction. Lastly, actor bonds refer to personal relationships, both formal and informal. They influence the individual actors’ interpretations of other actors’ behaviour and identities, and thus how and the extent to which activity links and resource ties are built and possibly formalised.

Each of these layers – a bond, tie, or link - can be characterised by the degree of coupling it involves. For example, actor bonds can be tight (involving close cooperation and a high degree of responsiveness between two or more people), or rather loose. An example for tight coupling in terms of resource ties would be a Just In Time regime. Distinguishing between different types of links helps us to comprehend and classify the variety of connections between organizational elements. Later we will show a classification of these layers in the case of the CdD.

**COUPLING AND SYSTEMS CLOSURE**

The focus of this study is the internal and external couplings of a system, and their links with systems closure. We define ‘systems closure’ to mean the extent to which an organization is coupled with its external environment. The degree of closure of a social system affects, for example, membership criteria, or the extent to which the functioning of the overall system depends on the state of the environment. Closed systems are loosely coupled with the environment; open systems display tighter coupling with the environment. Table 1 illustrates some examples of the relationship between systems closure and intra-organizational coupling.
by combining Thompson’s (1967) notion of open and closed systems with Orton and Weick’s (1990) discussion of the coupling metaphor.

TAKE IN TABLE 1 ‘EXAMPLES OF SYSTEM CLOSURE AND INTRA-ORGANIZATIONAL COUPLING’ HERE

An example of a system that is tightly coupled with its external environment (i.e. open) and at the same time loosely coupled internally is a large state university with its different faculties and departments. Another example is the multilateral alliances currently developing between airlines where autonomous but increasingly interdependent organizations establish federations.

On the other hand an army as an institution with its troops, material, staff and rules, constitutes a closed and tightly coupled system. An organizational element of an army such as a battalion may have within it sub-elements tightly coupled to each other in the form of interdependencies between individual soldiers, and between soldiers and their equipment. Yet they remain an open system in that they are very dependent on, and must be responsive to, changes that come about from the external environment. Another sub-organization of the military is that of individual elite forces (e.g. paratroopers) who are dropped behind enemy lines and operate individually or in small groups. They are a closed system in that their type of activity requires loose coupling from the environment, while they must also be able to operate individually and independently. Similar features can be found with the Jesuits and other religious missionaries. One aspect of closed but loosely coupled systems is that in many cases loose internal coupling is permissible because of systems closure. We will show later how these patterns can also be found in our case study, and how the CdD case is an example
for different combinations of degree of closure and degree of coupling permitting social systems to face different types of change. Going beyond the present case, Table 1 gives examples of organizations that are largely successful, and suggests that this is in part so because their closure/coupling configuration is adequate to the task at hand. In terms of organizational survival, this leads to the question of responsiveness (and/or vulnerability) to change. We will discuss how different coupling/closure configurations can be advantageous for certain organizations facing different types of change.

A CASE STUDY OF A SPECIFIC SYSTEM: THE CDD

In this section, we first outline our methodology, and then proceed to present a case study of the CdD as a social system, paying attention to the links which bind its elements together; and connect it to the wider environment. We draw attention to the historical development of the CdD, its philosophy, its objectives, life inside its Housed, and its links with the outside world. We apply Håkansson and Snehota’s (1995) three-layer classification of relationships to analyse the theoretical issues and to show how the case study illuminates them.

BACKGROUND TO THE RESEARCH

The authors were members of the *Le Conseil Scientifique de l’International Journeyman Programme*. The International Journeyman Programme (IJP) was a project to offer high-skills training in construction and engineering to young people from the north of England by passing them through the CdD. The IJP was supervised by the IJP Project Steering Group that represented small local businesses, Gateshead Borough Council (GBC), a local authority, and the Department of Trade and Industry. *Le Conseil Scientifique* advised the IJP Steering
Group on present and future policies. In this capacity the authors had access to the main participants in the UK and in France, including managers and trainers in factories in France, and the UK apprentices passing through the system. The role adopted by the authors in the project was one of academic researchers rather than participant or action researchers.

Initially a study of the CdD from the perspective of systems coupling and closure was not the main aim of neither Le Conseil Scientifique, or of the IJP. Rather it was the relevance and applicability of the high-skill vocational and educational training (VET) in the north-east of England. At first the IJP assumed that British youngsters could be exported and processed through the CdD system of vocational training. Therefore the problems initially focused on recruiting and selecting young British apprentices and sending them for training with the CdD in France. This involved liaising with the British labour market agencies to find a suitable pool of recruits, developing methods of selection, designing induction procedures for successful applicants, designing a ‘taster’ placement programme of three-weeks’ duration in which successful applicants could experience life in a French factory and in the CdD. Five of the British apprentices were then selected as Apprentice, to live and work in France.

After two years it became apparent that the export model did not work and could not be made to do so. For fuller appreciation of the reasons for the failure of this strategy see Malloch and Redman (2005). At this point the IJP considered whether the CdD system could be imported at all into the UK. When discussing the possible reasons for the IJP’s failure, and the long-term survival of the CdD in general, the authors found that they increasingly used the coupling metaphor and references to systems closure in their conversations. It was at this

\[2\] An Apprenti is a young person in the initial stage of their apprenticeship.
point that the work on the present paper began, and that issues of organizational coupling and
closure moved centre stage.

RESEARCH STRATEGY

This study aims to gain an understanding of the dynamics of highly institutionalised social
systems. It accommodates research methods such as direct observation, informal
conversations, participant observation, open-ended and semi-structured interviews, and the
supporting written documents.

The research strategy employed was one of inductive theory building (see for example Martin
and Turner, 1986; Burrell and Morgan, 1979; Daft and Buenger, 1991; Das, 1983; Eisenhardt,
1989; Glaser and Strauss, 1967; Isabella, 1990; Locke, 2001; Pettigrew, 1990). Data were
collected in parallel with the study of theoretical concepts; we tried continuously to formulate
what we saw in the language of theory. From this, the metaphors of coupling and systems
closure emerged as a basis for discussing the phenomenon at hand.

The method of grounded theory building is particularly well suited to the study of a dynamic
system in that:

The naturalistically oriented data collection methods as well as the [grounded theory]
approach’s theory-building orientation permit the investigation and theoretical
development of new substantive areas as they ‘arrive’ on the organizational scene.
(Locke, 2001: 96).
Our research fits the description of Lee (1999) in that it occurs in a natural setting; the data derive from the participants’ perspective; it calls for a flexible research approach, and at times it runs “counter to the prevailing notions of control, reliability, and validity” (p.163.) Our work is theory based in that "a theory-based study takes phenomena apart and tells the story about the intervening variables and processes that explain what is happening in the organization" (Daft and Buenger, 1991). We worked in cycles; iterating between existing conceptual language and what we saw: generating explanations (Lynham, 2000), continuously linking and adjusting the concepts we found in the literature to the case at hand. Possibly the best description of our approach can be found in Bourgeois (1979): we first worked inductively from our empirical base, and, in a second step, worked deductively by extending existing theory.

In our opinion the coupling metaphor can be extended to encompass two important concepts and one key distinction. The concepts are the notion of variable degrees of coupling; and the introduction of a conceptual link between coupling and systems closure. The key distinction is between different types of change. We have two complementary aims. First, to build a conceptual link between existing writings on social systems; we draw on Orton and Weick’s (1990) conceptualisations of the coupling metaphor and link these to Håkansson and Snehota’s (1995) distinction between different types of links in a relationship. Second, we aim to elaborate on existing theories on coupling and institutional dynamics. These concepts and ideas emerged by talking about what we saw and using the concepts we found in literature. This led to an almost natural process of extending concepts and linking with existing literature. Indeed, we believe that one important function of academic writing – going much beyond hypothesis testing- is that of the elaboration of a conceptual language that helps us see, and describe what we see.
RESEARCH METHOD AND DESIGN

We held interviews with five managers of the CdD working full-time for that organization. These were two Prévôts\(^3\) responsible for managing Houses; two Prévôts responsible for managing the CdD’s activities in the UK, and the CdD manager responsible for developing their international relations. The last three served with us on the IJP Steering Group. They gave us insights into the structure, history, functioning and traditions of the CdD necessary to construct an overall view of this unique institution. We did not record these interviews as we considered it would inhibit the data gathering process, but we did make detailed notes. Further we were dealing with an organization which was closed, tightly coupled internally, and which relied upon normative controls. This seems to us to explain why much of the information gathered through formal interviews with those connected with the CdD was reliable, without necessarily being valid; that is, the data they provided were consistent without necessarily being wholly comprehensive. In the IJP data gathering did not fall neatly into pre-fixed categories such as ‘interviewing’ and we gained much valuable information in discussions held with respondents day-to-day interactions e.g.in committees, meetings and during site visits.

We further held interviews with the five representatives of UK organizations on the Conseil Scientifique. These represented potential employers in the public and private sectors, and state agencies. They all had an interest in making the high-skill training offered by the CdD available to British youngsters. These semi-structured interviews were recorded, transcribed and coded. We also held four interviews with trainers and managers in French factories in

\(^3\) A Prévôt is a Compagnon who works as a manager for the CdD.
Lille, Toulouse and Lyons who employed youngsters in training with the CdD. Three of these were not Compagnons; one was. Again we did not record these interviews but we did take detailed notes of these encounters.

In-depth interviews were held with the five UK Apprentis who were offered full-time permanent employment as apprentices in France and who lived and worked in the CdD for at least six months. The interviews were semi-structured and focused on the apprentices’ life in the Compagnonnage. They were recorded; the tapes were transcribed and then coded for items and themes of interest. The UK apprentices were aged 18-20 and their academic achievements were modest. Two came straight from full-time study, the other four had worked and passed through some type of training scheme in engineering, and two had worked for Japanese firms. Thus they were well placed to compare their experiences in the Compagnons with that on offer in the UK. It is appreciated that these are small numbers, but they do represent all the UK apprentices. All were interviewed on at least two occasions.

Debriefings conducted by means of Nominal Group Technique (Delbecq and Van de Ven, 1971) with three cohorts of UK youngsters who completed all or part of the initial three-week programme of life in the House whilst working in French factories. The size of these groups varied between 8-12 participants. These sessions were recorded, transcribed and analysed for relevant points. In all 70 interviews were conducted with 60 different participants. The sources of information for this research are listed on the Table below

**TAKE IN TABLE 2 ‘RESEARCH DATA SOURCES AND TYPES OF DATA OBTAINED’ HERE**
A CASE STUDY OF THE CdD

The CdD offers high-skill VET (vocational education and training) to about 8,500 young people in 23 trades in engineering, construction, baking, clothing and confectionery through a network of 50 Houses, each a residential college incorporating classrooms, workshops and living accommodation. By day the young Apprentis and Aspirants \(^4\) work in local factories, each evening and weekend they return to the House to study. Each House is recognised by the French authorities as being a Centre de Formation d’Apprentis (CFA) or approved training centre. Apart from its antiquity, the CdD has other interesting features, notably that it is one of the largest private providers of high-skill VET in Europe; and the CdD and the Freemasons are the only two non-religious initiation-based organizations in Europe (Guénon, 2004).

The CdD represents a work ethic described in d’Iribarne (1994) as Montesquieu’s “The Honour Principle”. Iribarne conducted his research on “patterns of action” in large French bureaucracies comparing his observations on everyday French organizational life and workers’ attitude with factories in other countries (p.82). The Honour Principle is a specifically French phenomenon, characterised by a high degree of formal flexibility and an imprecise division of accountabilities and responsibilities on the one hand, and “dedicated fulfilment of obligations that traditionally fall to the particular occupational category to which each individual belongs” (p.85) on the other: “Many expressions such as ‘doing one’s job’, ‘doing one’s work properly’, […], reflected this form of the sense of duty.” (ibid.). The

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\(^4\) An Aspirant is a trainee who has successfully completed the first stage (Apprenti) of his training.
Honour Principle is thus reflecting a value- and status-based worker rationale, rather than a purpose-based one.

An organization’s current structure partly reflects the epoch in which the industry was founded (Mintzberg, 1979; Stinchcombe, 1965); therefore we need to understand the origins of the *Compagnonnages*. Their history is unclear but they emerged as a force in the seventeenth century from amongst the work organizations of the *Ancien Régime*, such as the guilds, religious orders, and the confraternities. The *Compagnonnages* borrowed from them all, combining their features into a rich blend of religious symbolism, rituals, ideas of honour, language, fraternity, hierarchy, definitions of skill, and division of labour (Truant, 1994, pp.48-72).

The *Compagnon* was a craftsman who worked outside of the guilds. Although they had features in common with contemporary work organizations, they differed in one crucial respect: they refused to admit employers. The *Compagnonnages* defended worker interests against rapacious employers, provided training schools, managed the network of Houses, directed apprentices through the Tour of France necessary to complete their professional training, and supported needy members. The absence of any employer participation and direct contact with a ‘product’ permitted the evolution of a central strand of the CdD’s philosophy, which can be seen today. We heard it many times during our dealings with the CdD but one of the *Prévôt* responsible for the CdD’s operations in the UK stated it most clearly to us.

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5*Compagnonnage* is both a singular and collective noun. Historically there were numerous; today only three exist. To avoid confusion we use the term *Compagnonnage* to denote the CdD; and *Compagnonnages* to refer to them collectively.
The *Compagnons* is not like a firm. We do it for the idea of people growing up with us, of taking up the trade and keeping it alive. … The first thing you have to do as a firm is to sell, to make money. We don’t have to make anything. Every *Compagnon* gives a bit of himself.

Kieser (1989) argues that the evolution of modern formal organizations from the medieval guilds required three evolutionary steps. The first was the separation of individual motives from individual goals. Like today’s worker co-operatives which try to make their organizational goals and practices match their members’ needs and value systems, medieval work organizations deployed normative power and elicited moral involvement from their members (Etzioni, 1961). Modern work organizations achieve stability by replacing normative power with remunerative power, and utilitarian rather than moral involvement. The workers work for the money, accepting a growing split between their personal interests and those of their employer for cash. This gives the employer flexibility to accommodate the changes required by a changing environment. This was a necessary step for the emergence of new organizational forms, better equipped to serve the needs of the market place.

The *Compagnonnage* never adopted these new organizational forms. In their world there were no employers, the profit motive was not legitimised and they conceived of themselves neither as factors of production, nor as consumers. This world-view was installed at their birth and it still relevant. As Mintzberg puts it, “industries develop because of the technical and economic conditions of their time. As long as these conditions do not change for them there is no reason to expect them to change their structures.” (1979, p.229, our italics). The CdD is a pre-modern organization with medieval roots. A key step in ensuring that conditions do not change for them is to construct their organization as a closed system. Its sheer
longevity suggests that it has been remarkably successful in doing this. Today there are about 25,000 trainees and trainers in the three French Compagnonnages, of which the CdD is the largest. That three survive in France alone suggests that the French environment has some unique features which have helped to sustain them. We will discuss this further below.

To become a Compagnon is to become a ‘new man’; to symbolise this all Compagnons adopt new names as they progress through the CdD. The three dimensions of ‘new man’ can be defined as: savoir-faire, or task related skills; savoir, or theoretical knowledge; and savoir-être, to know how to be (Delamare Le Diest and Winterton, 2005). By savoir-être we mean the social skills essential to be a fully functioning and integrated member of the work group, family, firm, organization and society at large. It is this focus on savoir-être that is distinctive. Personal renewal and transformation are central to this process. This is symbolised by the choice of trades (métiers). All work done by Compagnons involves skilled hand-work to change natural materials into finished products. The production line, and administrative and professional work have no place in the Compagnonnage (Hautin and Billier, 2000; pp.51-56). Man, material, tools, the acquisition of skill, and personal development are all linked for the Compagnon. Trist and Bamforth’s (1951) study of UK coal-mining using a socio-technical systems perspective illustrates how technical change uncouples tightly-linked meaning systems in traditional work processes. One outcome of this philosophy has been to focus the activities of the Compagnons in occupational niches relatively untouched by Taylorism, massification and international competition.

The creation of the new man revolves around the notions of le métier and le devoir. Le métier gives work a central life interest and a moral and social focus. It is an activity that involves passing on knowledge and skills to other workers, helping other workers, preserving the
history of the craft and striving for better technical standards. One Compagnon expressed it in this way.

We don’t talk about “jobs” or “careers”. To us this sort of language is offensive. If you only “work” then what you are doing is a bind or something trivial. … Go and talk to someone who is unemployed and then come back and tell me that work is trivial and unimportant to him. (A Compagnon mason, quoted in Guédez (1994, p.35))

Le devoir means “duty”, “work” and “craft”; for the Compagnon they are linked ideas, defining both the Compagnonnage and the Compagnons as individuals, professionals and citizens. Le devoir and le métier were encountered many times during our meetings with Compagnons and non-Compagnons alike. For many of the UK Apprentis passing through the Houses and factories in France it was the most noticeable aspect of French working life. The positive attitude of the French worker was consistently rated as one of the two most striking feature of French factory life by the students participating in the ‘taster’ course. One commented during a Nominal Group Feedback session:

It is different in France. They are mechanical engineers and metal-workers; that’s what they want to do and that’s what they are. They say “I love my job, I love getting up in the morning”; it’s just like a hobby for them, they don’t do it for the money. It’s strange; it’s weird when you first go there.

Le devoir was a central and shared concept of early modern French society (Truant, 1994, p.60), it can be regarded as a powerful expression of the Honour Principle. This is a sense of duty emanating from membership of a certain caste that can find expression both in the
workplace and in citizenship at large. They have important consequences for definitions of “job”, “career”, “skill” and “motivation”. For d’Iribane (1994) the Honour Principle shows itself in ideals such as “lover of the craft”, “skill”, and “nobility of work” (p.90). d’Iribane finds support for this in Crozier’s (1963) reporting of his interviews with employees in French public sector organizations.

*Life inside the House.*

The CdD has three grades of member: *Apprenti, Aspirant* and *Compagnon*. *Apprentis* enter at 16 for a training that lasts up to three years. On successful completion of their training they can become an *Aspirant*, and undertake the *Tour de France*; this is a period of work, study and training in different parts of France or other countries, with different employers. Thus the *Aspirant* is exposed to different tools, materials, systems of work organization and customers. On the Tour the *Aspirants* stay in a House near their place of work. Progression to a higher grade of membership depends upon certification of competence as *savoir-faire* and *savoir-être* through assessments controlled by the CdD. *Aspirants* graduate to full *Compagnon* status after which they may serve the CdD for a further three years in some administrative capacity as a *Prévôt*, or as a *Maître* responsible for the training of *Apprentis* or *Aspirants*. Afterwards most leave the House and live in the local community as *Sédentaires*, when they retire they are known as *Anciens*. Both *Anciens* and *Sédentaires* continue to maintain their links with a House in their locality.

Every *Compagnon* has a responsibility to help the younger members. Young *Apprentis* share rooms with older members. *Compagnons* are closely tied together by a complex and interlocking set of horizontal social links. Youngsters enter as *Apprentis* and work their way
to *Compagnons* by passing tests of *savoir, savoir-faire* and *savoir-être* controlled by the CdD themselves. These are the sole criteria for progression. No credit is given to applicants because they are, for example, employers, or have undergone some other type of training. On completion of his training the *Compagnon* undergoes secret initiation rites. In these he symbolically rejects his natural family, adopts his fellow *Compagnons* as brothers, and takes a *Compagnonique* surname. For the duration of these rites the House is called *La Mère* (mother). Successful completion of these rites is marked by the awarding of canes, ribbons and colours. Members of the CdD were unwilling to talk to us directly about these initiation rites, or why they were secret, but one *Compagnon* interviewed by Guérez explained that the rites evoked a profound emotion of initiation and belonging, something that could only be felt and not talked about (1994, p.97).

An important part of *le devoir* was an obligation on members of the House to help each other. Training was not limited to trade skills; it also included *savoir-être*. One UK *Apprenti* described dinners, semi-formal occasions accompanied by dress codes and rituals:

> If you don’t follow the dress code one of the Compagnons will ask you to leave and change. … They are really strict with that. People are asked to leave dining room if they don’t have collars they get particularly annoyed if it happens a second time. They believe that it is something they have been doing all the years; it’s something that they expect should be done and has to be done. That’s what you are there for – to be a Compagnon and to live that life and you have to respect the way of life they follow.
The Maître de Stage and Prévôt played important parts in training and their influence was supported by a CdD strategy of appointing to these posts Compagnons who were only two or three years older than the Apprentis. These ‘near-peers’ presented themselves as positive role-models with whom Apprentis and Aspirants could form intense personal relationships (Herzog and Herzog, 1998, p.6). Sédentaires and Anciens had roles to play in the development of young Compagnons. Each Apprenti and Aspirant was given an Ancien or a Sédentaire to guide him through the trade tests necessary for adoption to higher levels of the CdD; the Sédentaires and Anciens sponsored their charges for adoption; and they invited their learners to their homes. They would come to the workshops at night and weekends to offer help and guidance, give talks to their trade on the history of the CdD and participate in the performance review of the young learners.

The Apprentis and Aspirant were bound to the CdD by economics and close supervision. Young learners had little disposable income; the resultant poverty cemented social bonds. Apprentis were dependent upon the financially more secure Aspirants to help fund their social activities. Direct supervision was important. The UK Apprentis all commented on how they would be asked to account for themselves if found outside a class during scheduled work periods. One commented:

There are always people on your back – but not in a bad way. For example they will want to know if you arrive late. You can’t take a night off; if you do your Maître de Stage will want to know why. They pick up on everything. It makes you think before you decide to take a night off because you cannot be bothered going to class. It makes you think that you have to learn.
These constraints meant that for many life revolved the House: emotional bonding, close supervision, financial ties, the acceptance of the House and its residents as family, the House as both a place of residence and study. These were the links that tied the Compagnons to each other and which made them the Compagnonnage.

**The CdD and the outside world.**

Links with outside world were less developed. All training, both managerial and technical was conducted in-house, and virtually all managerial appointments were internal. Of the four trainers and workshop managers interviewed who employed Apprentis and Aspirants only one was a Compagnon, but all respected the CdD for the high standard of the training. Pascal, a Maître de Stage in an engineering repair establishment in Lyon described the training as ‘thorough and exhaustive’, likening it to a Rolls-Royce car. Jean-Philippe, the head of a large engineering sub-contractor in Toulouse who employed CdD learners said “they have a love of work, a taste for it, a need to work; they never give up … they take pride in their craft and in belonging to the CdD.”

While the non-Compagnons recognised the quality of the trainees, they had little idea of how they were produced. Jean-Philippe remarked that “there is a culture behind all this, but I have no idea how they pass it on.” Pascal confused the CdD with the Freemasons throughout his talks with us. He commented on the lack of personal contact with the CdD, remarking that he had only had one meeting lasting 20 minutes with the Prévôt of the House which supplied his Apprentis, a meeting which took place on his factory premises and not in the House. Otherwise communications between firms and the world of the Compagnons in the House were limited to the carnet de progrès, a record of the Apprenti’s completion of workplace-
related training. Non-Compagnons could also consult the Encyclopaedia, a guide to tools and techniques used by the different métiers, written and published by the CdD.

Divisions between the Compagnonnage and outsiders could be seen in the language used by the non-Compagnons to describe the CdD. These included terms such as “clan”, “cult”, “insiders and outsiders”, “the logic of belonging”, and “monastic”. Frequent reference was made to the “esoteric practices” (rites and rituals) of the Compagnons. Non-Compagnons perceived themselves as being regarded by the Compagnons as ‘profane’. One respondent complained that, “the Prevôts never talk openly”. The situation was summed up by one of the UK Apprentis when we asked him to describe what being a Compagnon meant to him:

You can’t really describe what the Compagnons are about to people who don’t know about them. The impression even here in France is the Compagnons are some kind of sect. – like you are branded when you enter … that you do secret handshakes behind closed doors.

This apparent inability to manage communications with the world outside the House was of little concern to the Compagnons. Indeed, many saw it as asset. One Prevôt said:

[t]his closure permits the long-term survival of the CdD. From our closure we draw our inner strength and focus our thinking. Our time here is very private. Even the youngsters who leave us never talk in detail about their time spent amongst us. … and no Compagnon ever puts the fact that he is a Compagnon on his CV.
ACTIVITY LINKS, RESOURCE TIES AND ACTOR BONDS IN THE CDD

Using the interpretive lenses of activity links, resource ties and actor bonds we can now summarise illustrate the way systems elements in the CdD are tightly or loosely coupled. These are shown on Table 3 Tight and Loose Coupling in the CdD. This Table draws on material previously presented.

TAKE IN TABLE 3 TIGHT AND LOOSE COUPLING IN THE CDD HERE

We note three features of the loose linkages. First, they are highly codified and explicit. Second, they are weak. Both stem from the fact that the workplace belongs to another institution, one rooted not in le devoir or le métier, but in the uncertain world of French industry, peopled with actors who were not of the same Compagnons clan (Ouchi and Price, 1978) who neither shared the ideology of the CdD, nor would they submit to the CdD’s implicit, informal controls. These problematic linkages with the workplace legitimised two key features of the CdD as a system. First, they encouraged the use of formal and explicit liaison devices between the CdD and the workplace. Second, they created a need for the other parts of the CdD system to be loosely coupled with the workplace; for the CdD to continue to maintain its notion of le métier it could not afford to be too responsive to the ever-changing needs of the French workplace, its owners and customers.

Lastly, devices such as the carnet de progrès serve as physical buffers between the CdD and the outside world. A case can be made for them in terms of administrative efficiency, but organizationally they helped to encapsulate the world of the CdD from that of the workplace.
By contrast links from the House to other parts of the CdD system were strong and implicit. We can evidence this with reference to the *Tour de France*, and the role of the House in the formation of *Compagnons*. The *Tour de France* did much more than train *Aspirants*; it was a buttress maintaining the CdD system, and the House in particular. The migratory status of the *Aspirant* meant that they pumped knowledge around the CdD system. Without them, Houses would only hold only *Apprentis* and their mentors. *Aspirants* were importers of new ideas, spreading innovations from other geographic locales. This knowledge transfer was implicit and non-codified.

The House had an important role to play in the education, development and training of *Apprentis* and *Aspirants*. The training embraced highly formalised, functional, skill-specific learning as well as informal learning of a cross-functional nature, which came from different trades living together. The skills imparted were not merely those of the trade; the demands of *le devoir* and *le métier* imposed a much wider curriculum for the learner. Life in the House embraced behaviour codes imparted by the older members to the younger ones. Learning embraced *savoir, savoir-faire* and *savoir-être*, all of which were required in equal measure to train the whole, cultured man. The Houses, both individually and as a network, formed comprehensive community of practice (Wenger, 1998) which permeated and controlled most aspects of the learners’ lives.

The *Compagnon’s* assessment procedure links were explicit and implicit, codified and non-codified. For example, whilst the assessments of *savoir* and *savoir-faire* were relatively explicit and codified, learners also had to satisfy the other members of the House that they would be good *Aspirants* or *Compagnons*, a process which was very tacit and non-codified. The coupling in these links was very tight. Further evidence can be seen in the panopticon-
like nature of the work and study regimes demanded of the young learners, and the financially handcuffing of younger members, both to the House to their seniors.

The Houses are a separate sub-system. Although an integral part of the CdD system they were independent in the sense that individual Houses could be opened and closed without damage to the rest of the system. The loosely coupled nature of the individual House provided a valuable buffer against some important environmental shifts. One UK Apprenti described how his employer had been taken over; the new owners had strategies of massification and task simplification resulting in a reduction of the skilled work essential for his personal development. He had raised the matter with his Prévôt and Maître de Stage and they found him a new job in a different House.

The CdD is an identity transforming institution (Greil and Rudy, 1984) in which identities are remade. The Houses are the factories in which these social operations took place. To manage this process the technical and administrative activity links within the CdD are very strong. On the other hand external activity links are all weak. The CdD has virtually no links of commercial nature with the external world. Their focus is not on any type of commercial exchange relationship, be it the wage-work bargain, or the product market. Internal resource ties are very strong. Most of the resource flows concern knowledge. The passing on of social and technical knowledge is indeed one of the institutionalised pillars of the CdD, its raison d’être. On the external side, there are some resource dependencies with local companies for work placements for Apprentis, or the need to raise money through the French taxe d’apprentissage system.
Actor bonds in the CdD system are extremely strong; they are familial, highly institutionalised, and life-long. The initiation rites are a key part of their formation. In these the would-be Compagnon takes a new family, accepting unrelated men as his fictive brothers (Truant, 1994, p.13), the CdD offers them a surrogate mother in the form of the House (“la mère” or “la mère maison”). By contrast actor bonds with the environment are sparse and sporadic, to be activated as and when needed; an example would be a Prévôt’s personal network of acquaintances with the owners of local firms.

Certain aspects of this constellation of linkages, ties and bonds, both loosely and tightly coupled help us understand why this organization has endured over seven centuries and why the CdD cannot be simply dismissed as an eccentric anachronism of French economic history. We can consider its linkages, ties and bonds and its system of coupling as its resource base, certain aspects of which have provided the CdD with a sustainable durability. At one level the purpose of the CdD is to train the skilled man, with skill being widely defined as savoir-faire, savoir-être and savoir. It does this by means of the House, which can be seen both as a set of resource ties and as the locus of key activity links. In the case of the House both of these are tangible. Yet le devoir and le métier are equally important to the process of training the skilled man. In fact the House without these key elements is useless, rather like a factory without power. Le devoir and le métier are intangible resource ties which sustain the House. All three elements, le devoir, le métier and the House, form a social system whose output is the skilled man. This system is represented in Figure 1 ‘Skill as a Social System in the CdD’ below.
Of course *le devoir* and *le métier* are not only resource ties; they are also actor bonds energising mutual help and transmitting of the idea of the skilled man from generation to generation. The House is the locale in which all three – resource ties, activity links and actor bonds – become manifest. This system of internal couplings is a key strategic competence and *le devoir, le métier* and the House are the resource and asset base which sustain it. To conceive of the CdD as an organization only for training technically-competent workers is to fail to grasp its true significance and such a limited perception cannot fully explain its durability, of why it has survived for 700 years, centuries which have witnessed huge shifts in technologies, products, markets and raw materials. The CdD is not principally in that business. It makes new men rather than masons or carpenters and neither the product specification, nor the competences and resources required, nor the technology necessary for this task have changed over the centuries. In part this is why it has survived – and why also there may be problems in transplanting it to a different cultural soil.

**INTERNATIONALIZATION : A DYNAMIC PERSPECTIVE**

The internationalization of the CdD provides a good lens through which many of the problems of organizational adaptation can be observed. The CdD was partially internationalized with a few non-French members in its Houses; and a handful of Houses abroad. From 2002 the pace of internationalization quickened. Following the failure of the ‘export’ policy of the IJP, the idea emerged of establishing a network of CdD Houses in the UK. It was recognised that there would be many difficulties, but all crystallised into one meta-problem: would it be possible to transplant an essentially ancient French institution to the UK?
To answer this question we must understand the CdD as a dynamic system. Its history and strong institutional roots of the CdD make it a relatively closed system. Internationalization represents an environmental change different from past changes, and against which tight coupling and relative closure alone cannot protect it. We call this ‘the erosion of the institutional mother soil’ - the result of globalization. We consider that in addition to relative closure and tight coupling, a search for a new institutional grounding will be necessary; and that possibly this grounding and legitimation for further existence can be found in institutions acting as a countervailing force to the powerful trend of globalisation.

With respect to internationalization, the CdD continues to exist successfully. The relative closure of the system buffers it against environmental shifts; its longevity is due to its closure and not its responsiveness to environmental change. Two seminal writings on the cultural embeddedness of work attitudes are those of d'Iribane (1994) and Kallinikos (2003). They advance two views on workers’ attitudes toward their occupations, and whether or not there exists a link between occupational identity and the individual’s larger sense of citizenship.

D’Iribarne bases his discussion of the French work ethic on a concept of honour already described by Montesquieu (1748), one deeply entrenched in French society and which leads the individual to consider himself to be honour-bound to certain behaviour according to his “estate”, or socio-professional class. He argues there is change in what practice or action is considered to be “noble” or “right” at a particular time, but what is permanent is the concept of honour as the basis for action and self-identity of the individual.
By contrast Kallinikos (2003) juxtaposes what he considers to be mainly a characteristic of a historical socio-cultural framework, where an individual’s public and private roles constituted a harmonious whole and where a worker was “a solid individual capable of constantly assimilating and accumulating the lessons of a long-lasting occupational journey” (p.600) with that in a post-modern socio-cultural context, where “modern humans are involved in organizations qua roles, rather than qua persons” (p.595).

It is the variance in couplings between system elements, and the closure of the whole that buttress the CdD in France. Yet when the CdD moves abroad then the buttress becomes a millstone tied around its institutional neck as it attempts to swim in the seas of globalization. What makes the system integrated and coherent is a tacit meta-institution - the Honour Principle. It could be argued that extreme tacitness can be the guarantor of survival, against the odds, of an institution and of its extraordinary strength. It is, however, immobile and highly dependent on a certain external institutional context.

By establishing Houses in other countries it is possible to export organizational elements such as hierarchy, house rules, practices and procedures. However, the pivotal point of the CdD is a principle that is so deeply embedded in French culture. It is impossible to export the organizational equivalent of its DNA. To use a horticultural analogy, exporting a House can be likened to grafting. In the first generation after the establishment of a House abroad, we can still expect a very strong pheno-typical resemblance to CdD institutions in France, and even a survival of the Honour Principle, nurtured by the French Compagnons serving in the House abroad. Yet in the long term, the blueprint for further development – and the options for mutations – will be different. The graft will always be qualitatively different from the trunk, which depends so strongly on its embeddedness in the soil of French culture. The
Honour Principle survives change because stakeholders accept that change can only be induced on the basis of an existing commonly-held meta-principle (Crozier, 1963; d'Iribane, 1994). Thus, in the French context, what is considered to be ‘noble’ does change over time, but according to d’Iribane the concept of “honour as base of nobility” does not. (pp.92-3).

As it was the attempt at internationalisation in the UK failed. GBC were much attracted to the idea of working with the CdD, but as a UK public sector organization GBC were legally obliged to deal with the CdD as ‘suppliers’. Any relationship had to be based on a legal contract for economic services awarded by a process of competitive tendering. As a first step in the process of establishing the CdD in the UK, GBC wanted to employ some Compagnons on restoration projects, renovating old buildings and public monuments. Because no firm in the UK employed Compagnons in the required trades, it was hoped that the CdD would tender directly for some contracts. However the CdD had to decline to participate in the tendering process, pointing out that they did not employ any workers, neither did they make anything. In other words their coupling with this particular segment of their external environment was very weak, even non-existent. The graft could not be even brought to the plant.

**TWO TYPES OF CHANGE**

While the CdD has attempted to shield itself from change, it does face two challenges in this regard. The first challenge is the temporal change described by d’Iribarne (1994) where the underlying meta-principle remains constant. This we call ‘induced change’. Here the initiators of the change come mostly from within, and act as countervailing forces. Examples abound in history, such as the French Revolution or various worker movements in the 1800s in Europe. Even if they are not from within, they act in a clear relation to the system that is to
change. One example could be the USA trying to induce cultural changes in Afghanistan. Here ‘change’ implies the direct replacement of one thing with another.

The changes facing the CdD and other organizations are another type of change. We call this ‘change by erosion’. It is made of impulses for change emanating not just from interest groups that come from within the same cultural sphere, or directly within it. Rather it is a constant bombardment of exogenously generated ideas, concepts and institutions, many of which are contradictory. This is one of the key impacts of globalization: individuals, groups, organizations, societies are permanently bombarded by signals, most of which are not initially aimed at them, but rather let loose haphazardly in an increasingly interconnected and interdependent network of global information.

It is important to stress that diffuse change is not a ‘change’ in the voluntarist sense of the word, but rather an erosion. Erosion means that institutions and ideas disappear without an intended replacement. Instead of replacement, there are multiple choices without institutional guidance. To further clarify this distinction, Table 4 compares some features of induced change with those of change by erosion. These concepts were derived inductively when working around Iribarne’s (1994) notions of temporal (induced) change, because we found that some of the forces of change acting upon the CdD – such as globalisation and the proliferation of fragmented institutions - cannot be explained by induced change alone.

This conceptual distinction is useful since d’Iribarne’s (1994) explanation for the survival of the anachronistic Honour Principle can be used to explain partially the CdD’s survival to date:
The Honour Principle is grounded, according to d’Iribarne (1992:92) in the importance which French culture has traditionally given to the “distinction between what is noble and what is common”. This notion (d’Iribarne also refers to it as an “aristocracy of talents”) has persisted in France since medieval times, and is tied to the importance which the French tend to attach to standing in society, and the resulting strong status stratification (in contrast to, say, Germany or the Anglo-Saxon world).

Yet this is not an argument for its future survival. The contemporary global phenomenon of massive institutional erosion threatens the cultural soil which sustains it. Its future lies not in the mainstream of existing cultures and institutions, but possibly as part of a countervailing culture. In other words, the CdD as an institution will shift from a distilled, concentrated expression of a prevailing institution to being an expression of an institutional fragment, one of many in an institutionally fragmented world. Its grounding and self-understanding might transform its representation of French excellence to that of being a countervailing force, a system that resists the drift of the underlying meta-principle towards one of fragmentation and relativism.

This drift will imply a change in the configuration of closure and coupling in the CdD. A social system that has to buffer itself against change by erosion needs to be loosely coupled from the external environment; that is, it needs to be relatively closed. Activity links, resource ties and actor bonds with the external world should be sparse, and only exist to satisfy clear resource dependencies (Håkansson and Snehota, 1995). It is here that Pfeffer and Salancik’s (1978) discussion of resource dependencies as a “trade-off between autonomy and survival” becomes very plastic. It is also here that we can see a link between couplings that are external and internal: one way to maintain loose coupling with the external world is to
maintain tight couplings internally, especially in terms of activity links and actor bonds: these are the types of links that help maintain institutions, rules, shared understandings, conceptualisations and sense making patterns alive. Table 5 ‘Coupling, Closure and Types of Change’ attempts to illustrate how these two types of change could be met by differently coupled systems.

Table 5 does not take into account couplings at different levels, or variable couplings. However, we feel that it illustrates the variety of a system’s reaction, and possible adaptation to, the two types of change. It should be clear that the coupling structure of a system is highly contingent on its need to respond to (or buffer from) the two types of change. We suggest that to some extent, an organization’s success can be explained in terms of in how far they managed to adapt their internal and external couplings to the type of change they need to either resist, or adapt to, in order to survive. There is a potential for future research here.

CONCLUSIONS

We have tried to extend the discussion on the dynamics of organizations as social systems by proposing a conceptual framework which can help us to shed light on organisational change and survival. We highlight three main points. First, it is important to extend the use of the loose coupling metaphor to include other types of couplings. Second, we examine the type of elements that are coupled. Elements can be both tangible and institutional. We use the categories of activity links, resource ties and actor bonds that were proposed by Håkansson and Snehota (1995).
As evidenced in Table 4, the pattern that appears from matching different links to the degree of coupling depicts an organisation that is tightly coupled within, and loosely coupled without. This has implications for our third point, where we suggest that in examining the dynamic component of organisational coupling, it is important to distinguish between two types of change, which we call “induced change” and “erosion”, respectively. We argue that the CdD is currently facing change by erosion, in other words, an erosion of the institutional environment in which it has been grounded. As an organisation that is tightly coupled within, and loosely coupled without, the CdD has so far managed to buffer itself from the erosions of a changing institutional environment. This has been largely possible due to its grounding in the tacit meta-institution of “Le Principe d’Honneur”, a particularly French attitude to work well done. Indeed, it appears that in order to be successful, coupling configurations of an organisation must take into account the larger institutional and socio-cultural context.

Using the internationalisation of the CdD as an example for change, we have suggested that after ‘grafting’ the cutting of an organization structure onto a different socio-cultural trunk rooted in a foreign soil, the graft will, at the beginning bear pheno typical resemblance to the parent, but in the long run the tree will develop quite differently because the institutional ‘mother soil’ is different. We conclude by indicating that these phenomena of change through erosion are not unique to internationalization, but can also be found any type of institutional change that is characteristic of a post-modern world, a world where change will come by increasingly by erosion.

We hope that conceptual vocabulary used in this paper - the combination of coupling and organisational closure, and the distinction between two types of change- might help
understand the adaptation and survival of organisational forms, practices and institutions to
differently changing environments.

Bibliography


Table 1: Examples of System Closure And Intra-Organizational Coupling

<table>
<thead>
<tr>
<th></th>
<th>tightly coupled internally</th>
<th>loosely coupled internally</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>open system</strong></td>
<td>• military detachments in action</td>
<td>• large state University</td>
</tr>
<tr>
<td></td>
<td>• news desk team</td>
<td>• Airline Alliance Groups</td>
</tr>
<tr>
<td></td>
<td>• supply chain</td>
<td>• Industry Cluster</td>
</tr>
<tr>
<td><strong>closed system</strong></td>
<td>• Military (institution)</td>
<td>• Jesuits / missionaries</td>
</tr>
<tr>
<td></td>
<td>• most religious orders</td>
<td>• Paratroopers operating individually</td>
</tr>
</tbody>
</table>
Table 2: Research Data Sources And Types of Data Obtained

<table>
<thead>
<tr>
<th>DATA SOURCE</th>
<th>TYPES OF DATA OBTAINED</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 UK <em>Apprentis</em> who lived and worked in the <em>Compagnonnage</em></td>
<td>Unstructured interviews, semi-structured tape-recorded in-depth, interviews, e-mail exchanges, socialising</td>
</tr>
<tr>
<td>3 French <em>Apprentis</em> who lived and worked in the <em>Compagnonnage</em></td>
<td>Unstructured interviews</td>
</tr>
<tr>
<td>2 senior members of the CdD headquarters’ staff namely:</td>
<td>Unstructured interviews; inputs into presentations and symposia, socialising</td>
</tr>
<tr>
<td>• The Director of Training and Research</td>
<td></td>
</tr>
<tr>
<td>• The Director of International Affairs</td>
<td></td>
</tr>
<tr>
<td>2 <em>Prévôts</em> responsible for CdD affairs in the UK</td>
<td>Unstructured interviews; semi-structured (unrecorded) interviews inputs into presentations and symposia, socialising</td>
</tr>
<tr>
<td>3 <em>Prévôts</em> responsible for managing Houses in Lyon, Toulouse and Muizon</td>
<td>Unstructured interviews</td>
</tr>
<tr>
<td>2 <em>Maîtres de Formation</em> in factories employing <em>Apprentis</em> and <em>Aspirants</em> in Lyon, Muizon and Toulouse</td>
<td>Unstructured interviews</td>
</tr>
<tr>
<td>2 <em>Maîtres de Stage</em> in CdD Houses in Lyon and Toulouse</td>
<td>Unstructured interviews</td>
</tr>
<tr>
<td>2 Non-<em>Compagnon</em> work colleagues of UK <em>Apprentis</em> in Toulouse and Lyon.</td>
<td>Unstructured interviews</td>
</tr>
<tr>
<td>Numerous attendances at CdD presentations to colloquia, meetings etc between 2002-06</td>
<td>Handouts, listening to debates</td>
</tr>
<tr>
<td>3 Nominal Group Technique sessions run with 30 returning UK youngsters who had attended a short ‘taster’ course of life in a House and work in a French factory.</td>
<td>Tape-recorded</td>
</tr>
<tr>
<td>5 UK representatives on the International Journeymen Programme Steering Committee representing the following organisations:</td>
<td>Unstructured interviews, semi-structured tape-recorded in-depth, interviews, e-mail exchanges, socialising</td>
</tr>
<tr>
<td>• UK Department of Trade and Industry</td>
<td></td>
</tr>
<tr>
<td>• Gateshead Borough Council</td>
<td></td>
</tr>
<tr>
<td>• MKW Engineering, Newcastle</td>
<td></td>
</tr>
<tr>
<td>5 Visits to CdD Houses in Lille, Toulouse, Muizon, Paris and Lyon</td>
<td>On-site observation of artefacts and symbols.</td>
</tr>
<tr>
<td>Leaflets, books and other publications issued by the CdD</td>
<td></td>
</tr>
</tbody>
</table>
Table 3: Tight And Loose Coupling In The CdD

<table>
<thead>
<tr>
<th>Activity Links</th>
<th>Resource Ties</th>
<th>Actor Bonds</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tight</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• A national network of Houses, each a self-contained college, but part of a network permitting the …</td>
<td>• Training leading to awards and titles carrying status and labor market value.</td>
<td>• Creation of a brotherhood</td>
</tr>
<tr>
<td>• <em>Tour de France.</em></td>
<td>• Information flow within CdD.</td>
<td>• … and therefore a family (the House as ‘<em>la mere</em>) and life-long relationships.</td>
</tr>
<tr>
<td>• The CdD as a skills accrediting agency.</td>
<td>• The House as a community of practice.</td>
<td>• Initiation ceremonies.</td>
</tr>
<tr>
<td>• relation between individual House and CdD.</td>
<td>• The House as a residence.</td>
<td>• Involvement of <em>Anciens</em> and <em>Sédentaires</em> in life of the House.</td>
</tr>
<tr>
<td>• Institutionalisation of procedures.</td>
<td></td>
<td>• Emotional links between <em>Maître de Stage</em> and <em>Apprentis</em>.</td>
</tr>
<tr>
<td><strong>Loose</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• <em>Carnet de Progrès.</em></td>
<td>• <em>Encyclopaedia</em> as sole means to transmit information to outside professionals.</td>
<td>• Relation between <em>Maître de Stage</em> (Compagnon) and <em>Maître de Formation</em> (outsider) as an <em>Apprenti’s</em> two supervisors.</td>
</tr>
<tr>
<td>• little engagement and visibility of CdD in outside world, except for some carefully staged colloquia.</td>
<td>• No significant market exchange with outside world: CdD does not make, or sell, anything.</td>
<td>• <em>Prévôt’s</em> personal acquaintances with outside firms.</td>
</tr>
<tr>
<td>• No significant information exchange; largely unknown to outside world.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 4: Induced Change and Change by Erosion

<table>
<thead>
<tr>
<th>Induced change</th>
<th>Change by erosion</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ underlying meta-principle remains intact (cf. Iribarne, 1994)</td>
<td>▪ many diffuse impulses for change</td>
</tr>
<tr>
<td>▪ change agents come from within the system… (e.g. revolutionaries in French revolution)</td>
<td>▪ exogenously generated impulses for change</td>
</tr>
<tr>
<td>▪ …or act in close relation with (and against) the established system (e.g. US forces in Afghanistan)</td>
<td>▪ impulses often not aimed at institutional change</td>
</tr>
<tr>
<td>▪ aims at changing an established order or overthrowing an institutional hegemony</td>
<td>▪ grounded in meta-institution of “pluralism”, “relativism”, or no meta-institution at all (postmodernist stance)</td>
</tr>
<tr>
<td>▪ uni-directional impulse for change</td>
<td>▪ no specific objectives</td>
</tr>
</tbody>
</table>
Table 5: Coupling, Closure, And Types of Change

<table>
<thead>
<tr>
<th>open system</th>
<th>System reaction to Induced Change</th>
<th>System Reaction to Induced Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Quick to respond, because change permeates quickly through the system due to tight internal couplings.</td>
<td>Impulse for change will not spread as quickly as in a tightly coupled system. Overall joint system response will be slow, but maybe not even required, because this type of system thrives on individual elements’ facility of adaptation.</td>
</tr>
<tr>
<td></td>
<td>System Reaction to Change by Erosion</td>
<td>System reaction to Change by Erosion</td>
</tr>
<tr>
<td></td>
<td>Vulnerable to fads etc. Danger of lack in institutional focus.</td>
<td>Vulnerable to fads etc. Danger of lack in institutional focus. Possible advantage is openness to innovation (such as in industry clusters)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>closed system</th>
<th>System reaction to Induced Change</th>
<th>System reaction to Induced Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>If change is induced from within, this is often synonymous with internal political struggle. Tight internal coupling means that this will spread through whole system very quickly. Very high resilience to induced change from without.</td>
<td>If change is induced from within, individual elements are highly responsive, which can be of an advantage, since each element needs to act on an individual basis and in an individual context (hence the loose internal coupling). Very high resilience to induced change from without.</td>
</tr>
<tr>
<td></td>
<td>System reaction to Change by Erosion</td>
<td>System reaction to Change by Erosion</td>
</tr>
<tr>
<td></td>
<td>Very high resilience (can also appear to be organizational inertia). Very high resistance to fragmentation.</td>
<td>High resilience.</td>
</tr>
</tbody>
</table>

| Tight internal coupling | Loose internal coupling |
Figure 1: Skill the output of a Social System in the CdD