LEARNING THROUGH DOWNSIZING IN TAIWAN

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ABSTRACT

This thesis is based on a study with 42 public servants, who were white-collar workers in the Taiwan Provincial Government (TPG). The downsizing in the TPG is used as an opportunity to explore how particular public servants adjust themselves to changes, how they interact with the bureaucratic organisation and how they use interpersonal networks to sort out difficulties in their work. In order to understand these situations, the case study method is used. Semi-structured interviews are also employed in this study.

This study aims to re-conceptualise learning, with reference to the way public servants interact with their colleagues and their environment. It attempts to build on the view that individuals' learning in bureaucratic organisations can be triggered by social processes emanating from their mutual engagements and shared practices. The claim is supported by data associated with introducing and discussing the concept of communities of practice. It supports the view that learning is a social practice and that its motivation grows out of the interaction between interpersonal networks and daily sense-making activities.

Based on this argument, the thesis traces 4 basic elements in relation to the desire to be accepted by the group, making comparisons, establishing interpersonal networks and engaging in exchanges. The argument is that learning is a by-product of social interactions. Considering the relationship between power and the market in knowledge, individuals engage in a learning process in order to acquire particular resources. This research indicates that the sluggish system such as the TPG still has the potential to break the power hierarchy of the bureaucracy so as to facilitate its members' learning of organizational knowledge. This research also suggests that the influence of the basic elements is modulated by 3 factors – one's value system, official business and one's attitude to interactions.

DECLARATION

This dissertation is presented in accordance with the regulations for the degree of Doctor of Philosophy. All materials have been properly identified and the work described in this dissertation is entirely original and my own, unless otherwise indicated. The author also confirms that no portion of this dissertation has been submitted for a degree of any other university.

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ABBREVIATIONS

DAR	Designated Appointment Rank
CoPs	Communities of Practice
KMT	Kuomintang
LPP	Legitimating Peripheral Participation
RAR	Recommended Appointed Rank
SAR	Selected Appointment Rank
TPG	Taiwan Provincial Government

Chapter 1

Introduction

1.1 The Objective and the Theme

The aim of this study is to theorise some elements and factors that are extracted from data in order to extend research on communities of practice (CoPs).

This study attempts to answer the following questions:

- How do people's interactions affect knowledge sharing and creation?
- How are employees' acquisition of knowledge and their engagement in learning in a bureaucratic organisation motivated by their interactions?
- What is the significance of those interactions revealed by fieldwork to the concept of communities of practice?

The above questions identify the three topics upon which this study will focus: the theoretical framework of communities of practice, the particular features of the bureaucratic environment and the empirical evidence of people's interactions within their circumstances.

In order to gain a deeper understanding of people's interactions and also to bring my interviewees' interactions into sharper focus, I will place my emphasis in this research on public servants' interactions with changes in their environment and with their colleagues. All the interactions that are revealed by this research will be attributed to four basic elements: one's desires to be accepted, making comparisons, establishing networks and engaging in exchanges. Some factors which may influence the basic

elements will also be revealed, such as personal value systems, official business and personal attitudes to interactions.

In this Chapter, I shall be discussing the reasons for my choice of the concept of communities of practice, and explaining why I used the Taiwan Provincial Government (TPG) as a case to study. After defining key terms, I shall introduce the layout of this thesis and the respective intentions of each chapter.

1.2 Rationale for Choosing TPG as a Case to Study

Before coming to England, I had worked in the public sector in Taiwan for 5 years, therefore I knew a good deal about public servants' learning. Because I always kept an eye on changes in public servants' lives, I produced a dissertation about privatisation and earned my first Master's degree in industrial relations. Whilst reading for my second MA in England, the downsizing plan for the TPG was being discussed. One year later, the plan had been decided and its results affected the lives of about 129,000 employees (Chen 1999:22-27). This change, which restructured the bureaucratic organisation, made me rethink the relations between individual learning and organisational change within the context of the TPG. Because this policy has not been fully implemented, the identity of the employees in the TPG is between public servant and civil servant. In this study, I adopt the term "public servants" to describe these people and also to identify their original status.

1.2.1 Learning in Bureaucratic Organisations

Easterby-Smith (1997:1085-1113) has carried out a sound literature review of some barriers to learning within a bureaucratic context. These obstacles include hierarchies and the power differences between levels, political conflicts and selective networks.

Since a bureaucratic organisation usually has both rules and rule proliferation (Schulz 1998:845-876), it is possible that individual learning within the organisation is slow, because the environment itself fails to encourage and facilitate the acquisition of new knowledge. However, some scholars, such as Banerjee (1998:147-164), assume that steady rules give a chance for organisational routines to develop in which tacit knowledge is embedded. Bartlett and Ghoshal (1998:34-39) believe that routinely diffusing expertise and transferring practices is the only way to link isolated expertise and fragmented knowledge in an organisation. Thus, an interesting situation occurs: A stable environment may perhaps hinder individual learning, but it can still possibly be of benefit to knowledge transference and accumulation.

The influences of organisational routines are so strong in bureaucratic bodies, that by using a government organisation as a case study it becomes possible to elucidate the practical interactions of knowledge creating and sharing. On the one hand, routines embrace employees' daily life in the work place, by revealing when and how to perform habitual tasks (Gherardi, Nicolini and Odella 1998a:273-297). On the other hand, organisational routines convert "learning by doing" into "remembering by doing" (Chris 1996:621) whilst promoting learning from an individual level to the organisational level. However, in my opinion, organisational routines are ineffective without individuals. The interactions between organisational routines and individuals 'bridge' the gap between knowledge and learning. Not only will I explore this 'bridge', but I shall also endeavour to discover the manner with which individuals' learning interacts with knowledge domains and communities of practices on the 'bridge'.

Hence, in order to access the 'bridge', I cite three reasons for my choosing the public sector to study:

- a large and bureaucratic organisation usually follows stable and easily observable routines, so I will be able to get an accurate picture of employees' daily life in their workplace without too much difficulty
- a significant bureaucratic public sector is usually regarded by Taiwanese people as an inefficient organisation, thus I shall question the notion that the sluggish environment can cultivate useful learning. (the word "sluggish" is directly from the data. Interviewees, such as Mr. X and Mr. S, used this term to describe a general Taiwanese view about the public service)
- if my studies lead to the conclusion that a lethargic public sector organisation like the TPG can nevertheless promote interactions favourable to learning, it may teach useful lessons for other sorts of organisation. (I use the word "lethargic" in order not to repeat the word "sluggish". "Lethargic" also derives from interviewees' conversations, for instance, Ms. A and Mr. U)

1.2.2 The TPG and the Policy

In order to integrate different experiences of learning, I used the TPG as a case study. Faced with the threat of organisational downsizing, these employees had to devise individual strategies for maintaining and furthering their careers. The latter policy which is also known under the labels "restructuring" or "streamlining" in some literatures or government reports, constitutes a threat to workers in the organisation once they recognize that being a public servant will no longer provide them with a permanent job. Since some situations which came from the policy made them feel under pressure, nervous, anxious or upset, many employees made use of any means they could find in order to cope with their difficulties. This situation reveals some motivations which trigger individuals' behaviour and also stimulate their will to learn.

Some interactions and explanations in terms of learning will be found from the TPG case study.

1.2.2.1 The TPG

The starting point for this investigation is the situation of employees in the TPG which has grown over its half-century of existence. Before being merged into the central government, it was a huge organisation of 29 departments and had about 129,000 employees (Chang and Chen 1998). This had been a 'bureaucratic organisation' with employees in fixed positions and with employment security.

1.2.2.2 The Policy

In 1998 a policy, the provincial downsizing regulations, was formally issued. In order to improve efficiency by shortening lines of decision-making, the future provincial government would be structured as three different bureaux, with a total of seven departments, three offices, one committee and a unit. Consequently, twenty-nine departments would be abolished (Chen 1998). It was planned that this policy would be fully implemented by 1st January, 2002. However, up to now, the plan has not been completed, even though most of departments have completed their restructuring processes.

Most employees (except temporary workers) in the TPG got their jobs through the civil service examination system, and their jobs were guaranteed by the government. Until downsizing was announced, these employees never worried whether their abilities could compete with others' or whether they were able to survive in the organisation without additional learning. According to the pilot study of this research, the sudden impact of the downsizing policy showed that:

- organisations which want to survive must buckle down and improve on what they do now,
- employment security protected by law or regulation is not a panacea for keeping jobs any more, and
- stagnation and the decline of learning ability can be caused by existing circumstances.

The change in the organisation provides me with an opportunity to examine individual learning within this context. If we believe that individuals' behaviour will be affected by certain important events happening within the environment in which they are learning, behaviour designed to cope with difficulties can probably be detected more easily when certain events happen. This research is going to use the downsizing policy in the TPG as an opportunity to highlight individual learning within the context of organisational change.

This research does not attempt to make a comparison between people's learning interactions before the policy and those after the policy, in order to indicate the influence of the policy on learning. Rather, this study, which is based on the belief that people's learning may be more obvious during a period of change, tries to explore concrete cases of interaction in order to understand people's behaviour within a group. Therefore, the downsizing policy, in this research, becomes a stepping-stone to understanding informal learning in the organisation, as the stresses and strains of the downsizing period made learning more visible than in normal situations. The focus of this study is on understanding how people have interacted with the bureaucratic organisation and with other colleagues in this atypical situation. Theorizing the

findings, I will elucidate different views of learning and knowing and attempt to contribute new ideas to the concept of communities of practice.

1.3 Rationale for Choosing "Communities of Practice"

The main reason for choosing this topic is a personal interest in the relations between individual learning and organisational knowledge. Studying the learning organisation in the Masters program was the starting point for this research, especially when I read Senge's (1990) work, *The Fifth Discipline*. It was then that I believed that people's interactions with each other might provide them with abundant chances for learning. Having discussions with some of my friends in the Business School, I started paying attention to the field of 'Knowledge Management' as well as the concept of 'Communities of Practice'(CoPs).

1.3.1 Communities of Practice

The term "communities of practice" was coined in Lave and Wenger's (1991) work, *Situated Learning*. Seven years later, Wenger (1998a) in his book, *Communities of Practice: Learning, Meaning and Identity*, further developed the concept (Stamps 2000:78-80). According to Wenger (1998a:73-84), a community of practice actually embraces three elements: joint enterprise, mutual engagement and a shared repertoire of communal resources. It groups people together through their shared purposes and their strong desire to explore other members' insight (Hildreth, Kimble and Wright 2000:27-38). In pursuit of these purposes, people in the community engage in shared practices and develop a common language. This also enables the community to foster its shared learning and the interest of its members (Peile and Briner 2001:396-403).

Some scholars such as Brown and Duguid (1991:40-45) as well as Gherardi and Nicolini (2000:7-19) see these shared practices as a social and collective phenomenon, through which the individual performs tasks, acquires knowledge and interprets events. Some, such as Gongla and Rizzuto (2001:842-863), see the concept from the angle of network and suggest that the term "knowledge networks" can better reflect the concept of communities of practice. Furthermore, Lesser and Storck (2001:831-842) suggest that a community can develop social capital, which enables individuals to foster a sense of trust, mutual obligations and common grounds for interactions.

The concept of CoPs highlights a particular learning atmosphere which includes openness, common culture, mutual interests, collective learning, embedded learning and freedom (Storck 2000:8-11). From this point of view, there are three dimensions, in terms of learning, which need to be emphasized:

Firstly, learning in these circumstances becomes part of one's daily life, with some types of learning being so automatic that people do not notice them. Our daily life and our interactions with other people provide us with plenty of chances for learning. The knowledge, including what to learn and how to learn it, is also a stepping-stone which enables us to trigger our next learning.

Secondly, the concept of shared ground is underlined in CoPs. Common practices make people who hold different opinions communicate with each other, so that knowledge creation becomes possible. A common language also enables members to quickly understand each other so as to accelerate knowledge sharing.

Thirdly, the concept of CoPs focuses on "practices" within a community. The power that derives from people's interactions cannot stay away from this issue. The relations between knowledge and this power may enable us to reflect on the concept of CoPs. Reasoning such as the above provides me with some clues to link the concept of CoPs with the employees' situation in the TPG.

1.3.2 Establishing Networks and Engaging in Exchanges

Firstly, interpersonal networks and the fact of exchanging know-how are important to developing knowledge. Because of the downsizing, some employees preferred using interpersonal networks to interacting with organisational activities and to sorting out problems. This situation seems to echo what Araujo (1998:317-336) suggests, that learning is constructed within *'heterogeneous networks of social and material relationships'*. He also points out that learning and knowing is a network itself, which provides opportunities for exchanging information and insights in order to seek out chances for developing knowledge.

1.3.3 Gaining Group Acceptance and Making Comparisons

Secondly, gaining group acceptance and making comparisons are crucial elements, which enable individuals to initiate learning. In order to approach certain acknowledged achievement, some employees in the TPG made comparisons with their peer groups. According to Wenger, McDermontt and Snyder (2002:20), the communities provide *'homes for identities'*. Because of these identities, members recognize what they must pay attention to, what they ought to participate in and what they should stay away from. Hence, identities make people in the community identify themselves and their environment, as well as vivify communities. Through the process of identifying its members with the community itself, the community may gradually

become a system which '*generates and organises practices and representations that can be objectively adapted to their outcomes without presupposing the conscious pursuit of ends or express mastery of the operations necessary in order to attain them*' (Gherardi, Nicolini, and Odella 1998a:273-297).

1.3.4 One's Value System, Official Business and One's Attitude to Interactions

Thirdly, one's value system, official business and one's attitude to interactions are also essential to the learning from interactions. Based on people's experiences and knowledge and on observations and attributions, individuals learn what is important for them (Cyert & March 1963:7). In a community of practice, because the common identity values each one's action (his or her participation), shared practices become meaningful for each individual. These practices are not based on the institutional agenda, but on the group value to each member. Since it is meaningful for the individual to identify his or her own value with the group value, he or she has motivation to participate in shared practices. The knowledge which he or she retrieves through participation is perhaps not meaningful for others, but it is for him or herself. This idea echoes what Gronhaug and Falkenberg refer to as, '*people always focus their attention in a specific direction due to their limited perceptual capacity*' (Gronhaug & Falkenberg 1998:93). Because the individual's value system respects shared practices, particular tasks and interactions that needs to be done in the group becomes meaningful to the individual. During the process of interactions, people's attitudes to the interactions are also involved, so that the results of the communications are influenced.

Wenger (1998a:74) believes that communities of practice are formed because members sustain dense relations of mutual engagement. On the same page, he mentions a sort of

coherence and argues that '*In order to be a full participant, it may just be as important to know and understand the latest gossip as it is to know and understand the latest memo*'. Accordingly, it seems that the dense relations for participation can be viewed as a kind of power to motivate the individual to acquire knowledge as well as the methods to access the knowledge. Establishing networks and engaging in exchanges provide the individual with opportunities for broadening his or her influences and accelerating knowledge sharing.

These four elements – gaining group acceptance, making comparisons, establishing networks and engaging in exchanges - are the basic ones which enable individuals to develop their knowledge as well as tools to access the resources of knowledge. On the other hand, one's value system, official business and one's attitude to interactions will influence the effect of the four elements so as to affect knowledge sharing and creation. These three items – one's value system, official business and one's attitude – that modulate the intensity of the four elements are viewed as adjustment factors in this research.

The four basic elements and the three adjustment factors form a framework, which enables me to theorise about the data collected in fieldwork. In later chapters, I will illustrate my points in detail about where these elements and factors come from and what these items mean with respect to communities of practice.

1.4 Definition

1.4.1 Learning

Learning is not easy to define and perceive, because it is an internal process, which is embedded in the individual or in the organisation. In this study, learning happens when

the individual is interacting with any stimulus. Although we may not be sure whether or not learning can absolutely result in knowledge acquisition, the individual has experienced learning when he or she feels that some knowledge has been acquired. Applying this point of view to organisational learning, we may not be able to determine whether or not the organisation is learning, yet we can see some 'products' of learning, which include organisational routines, regulations or documents.

1.4.2 Knowledge

Knowledge is another elusive concept, because knowledge is relative. In this research, I believe that knowledge is constructed by interactions, rather than attached to certain actors such as the individual or an organisation. The knowledge that I gain may confirm that I have experienced a process of learning. Presenting my knowledge to others however, does not necessarily imply that the other people experience the same process as mine. For them, my knowledge starts as a form of information and then may be converted into another knowledge combined with their cognitive structures and interacting with the information I have supplied. So knowledge is, in this case, not an absolute concept but one that depends on whether or not, and how, the individual digests the information which he or she gains from interactions.

On the other hand, knowledge has also the nature of absoluteness. Once information is integrated into a person's cognitive structure, knowledge may exist temporarily in one's mind and wait for other information to strengthen or modify it. People tend to trust knowledge which they have constructed, and to modify or test the established knowledge base by their prejudices (the modifying is also affected by the established knowledge), so that they form a judgement which enables them to construct more knowledge.

Such reasoning attempts to indicate that learning and knowledge are both concepts that include relativity and absoluteness. Interaction is the key which enables individuals to initiate their learning and knowledge process. Although an individual's concept of learning or knowledge does not necessarily ensure that other individuals are doing the same thing or producing the same results, I still try to construct knowledge, in order to approach reality, by way of interacting with the data and the materials I read.

1.5 Contribution

The contributions of this work are at least three-fold. First, I believe that the findings have some important theoretical implications, especially for the knowledge management debate and public administration literature. Secondly, they have implications for bureaucratic organisations, which are generally viewed as sluggish systems (Interviewees such as Mr. X and Mr. S believed that the public holds this opinion on bureaucratic organisations) but somehow may create favourable conditions for knowledge sharing. Thirdly, I provide some data on the relationship between individual and group-level learning, which may be able to identify the position of learning and knowledge in one's value system and also within the process of interpersonal interactions.

1.6 A Framework

The thesis has 9 chapters. The first chapter is this introduction where I explain my decision to conduct an empirical study on learning in a bureaucratic organisation. The second chapter is the theoretical part of the research. There I discuss scholars' ideas about the concept of CoPs in relation to the four elements and the three factors identified, which I will use as a framework of this research.

In Chapter 3, I will present the methodology employed in my fieldwork and will illustrate why I chose these particular methods to do the research. In Chapter 4, some background features of the TPG will be highlighted in order to show the particular bureaucratic system, the organisational culture and the interactions between supervisors and members. In Chapter 5, I will discuss the TPG environment (including its culture and system) in terms of knowledge creation and sharing. In order to bring the analysis from individual level to group level, three cases, in Chapter 6, referring to different groups will be introduced. The three cases show their respective ways of engaging in interactions.

From the group interactions, which are affected by common regulations and diverse organisational cultures, emerge four basic elements to construct knowledge interactions and three adjustment factors to regulate the basic ones. In deepening these elements, Chapter 7 will discuss the four basic elements - making comparisons, gaining group acceptance, establishing interpersonal networks and engaging in exchanges. Chapter 8 will focus on the three adjustment factors - one's value system, official business and one's attitude to interactions. The essential point for proposing these elements and factors is not to show how important they are, but to explain how they work together within the context of organisation and why the integration is meaningful for the concept of CoPs. These arguments will lead to the conclusion in Chapter 9.

Chapter 2

Communities of Practice

The aim of this Chapter is to identify the reasons why this research uses the concept of CoPs to frame the researcher's arguments. Some understandings about the concept will be illustrated. Reference is also made to particular issues which the researcher discusses in detail in later chapters. Some elements and factors that derive from these issues that will be highlighted in chapter7 and chapter 8 will also be introduced.

In order to give readers an insight into the focus of this research, this chapter also tries to explain concisely why these elements emerge, why they integrate with each other, and why they are related to the concept of CoPs. These illustrations can then provide a basis to explore how the elements interact with each other in the circumstances of the case study organisation, which are the main topics of later chapters.

2.1 From Learning to Knowledge

There seems to be a tendency for knowledge gradually to become the primary resource of capitalist accumulation, relegating land, labour and capital to a secondary position (Grant 1996:109-122). A trend has developed to increase the importance of 'knowledge-based' or 'knowledge worker' industries. In organisational theory and adult learning, concepts have therefore come to the fore that reflect these important societal and economic changes and their influence on the nature and functioning of organisations. They include human resource development, organisational learning (Huber 1991:88-115) and the learning organisation (Senge 1990). Recently 'knowledge management' has become a catch phrase in practical and academic communities.

2.1.1 Knowledge Management

Reviewing the literature, I classify scholars' ideas referring to the concept of knowledge management into four systems. The systems include the collecting system for acquiring and storing knowledge (Zack 1999b:45-58), the connecting system for transferring and applying knowledge (Badaracco 1991:108), the circumstantial system for accelerating the previously mentioned systems, and the cognitive system for associating learning with knowledge (Leonard-Barton 1992:111-125). The rise of the concept of 'knowledge management' can mainly be fuelled by the linkage between the four systems. For instance, Leonard and Sensiper (1998:112-132) argue that in order to collect knowledge, brainstorming sessions enable participants to acquire the insights and intuitions of other members of the group. For the purpose of storing knowledge, Pitt and Clarke (1999: 301-316) believe that through the process of codification, knowledge can be stored in individual brains and organisational routines. In terms of knowledge sharing, Tetenbaum (1998:21-32) discusses the case of Beckman Laboratories International to highlight the function of knowledge transferring, which makes a steady flow of information accessible to everyone in the company world-wide. Zack (1999b: 45-58) suggests that organisations must continually assess their knowledge to check if it is suitable to be applied to current circumstances. According to Zack, applying knowledge is not merely for achieving a target, but also for synthesising, adapting and transforming established knowledge in order to generate a new understanding.

2.1.2 An Environment to Support Knowledge Management

As I highlighted in Chapter 1, knowledge is not a simple phenomenon, but consists of several activities formally or informally undertaken in specific circumstances. Accordingly, some scholars, such as Davenport, Jarvenpaa, and Beers (1996:53-56) or

Goodman and Darr (1996:7-19), pay attention to the establishing of suitable environments. The primary focus of these efforts is on developing new applications of information technology to support the digital capture, storage, retrieval, and distribution of an organisation's explicitly documented knowledge. Schwarzwalder (1999:63-65) and Coates (1999:6-7) think that establishing an environment where communication can proceed openly and freely is the core to the idea of knowledge management. To improve organisational communication, some scholars such as Zack (1999a) advocate taking advantage of information technology to support the knowledge management architecture. Zack thinks that the effort will not be satisfactory if a company cannot electronically collect, index, store, and distribute explicit knowledge. Coates suggests that the focus should be on what information and knowledge is available and how to make the knowledge more readily usable by anyone, at any time in any place. *'Information is leveraged when it is codified, augmented, and disseminated and when it is accessible and identifiable by all in the system'* (Liedtka J. 1998:254-280). Scholars such as the above seem to highlight the importance of the 'mechanism' which enables the individual to access knowledge. When access has no barrier, the distance between people may become closer so as to have more chances for engaging in knowledge sharing.

2.1.3 Interacting with Tacit Knowledge

On the other hand, since some valuable knowledge is in a tacit style and stored in individuals' heads, this knowledge can probably be captured by interpersonal interactions such as mentoring and apprenticeship systems, convincing narratives and particular embedded procedures (Davenaport and Prusak 2000:81-83). Nonaka and Takeuchi (1995:57) suggest a spiral conversion process to deal with tacit and explicit knowledge in organisations. This spiral goes from tacit to tacit, from explicit to

explicit, from tacit to explicit and, finally, from explicit to tacit. Through the four modes, known as socialization, externalisation, combination and internalisation, they believe individual knowledge can be articulated and amplified into and throughout the organisation. The spiral starts all over again when completed. Gherardi, Nicolini and Odella (1998a:273-297) echo Lave and Wenger's (1991:98) idea, the concept of CoPs, and assume that knowledge is embedded within the growth and transformation of identities and also inherent in the relationships between members' participation and practice.

2.1.4 Individual Learning on the Interpersonal Level

From the angle of learning, since individual learning relies on the environment with which the individual is interacting (Gherardi, Nicolini, Odella 1998a:273-297), the interactions between learners and their environment cannot be ignored. The debate on organisation and individual learning is based on the supposition that if and how individual learning takes place on the organisational level is not self-evident. On the individual level, learning traditionally refers to the acquisition and interpretation of knowledge, which develops new understandings that could change one's potential behaviours. However, learning cannot be analysed only in the individualistic form. A re-defined concept about learning has emerged when the original idea is rethought on the interpersonal level where some factors (e.g. interaction) are considered together.

As the field evolves, existing ideas have been interpreted by various theories, and discussions from related fields have shown interest in extending the range of convenience of the concept (individual learning in the organisation) to their own areas. An example of reinterpreting the concept of individual learning would be the work on 'communities of practice' (e.g. Lave and Wenger 1991), which indicates that

individual learning is no longer equated with the appropriation or acquisition of knowledge, but has been regarded as the development of a new identity. In this situation, learning is not only a way of knowing the world, but also a way to become a part of the world. An example of extending the range of concepts would be to view learning as an integration which links with the philosophies of situated learning, knowledge creation and sense making (Richter 1998:299-316). In communities of practice, the locus of the learning process has shifted from the mind of the individual to the framework in which the interaction takes place; the essence of learning has altered from closed to open.

2.2 Communities of Practice

The majority of research into the concept of CoPs is inspired by the concept of situated learning (Brown, Collins and Duguid 1989:32-42). According to Lave and Wenger (1991:98), '*a community of practice is an intrinsic condition for the existence of knowledge, not least because it provides the interpretive support necessary for making sense of its heritage*', but also because it conducts the transmission of tacit knowledge and of knowledge-in-action (Gherardi, Nicolini, and Odella 1998a:273-297). According to Allee (2000), people in communities pay more attention to understanding rather than blind performing (dealing with tasks without thinking). Some scholars, such as Bielaczyc and Collins (1999:271), suggest that if everyone in the organisation is involved in a collective effort of understanding, the organisation can be viewed as one that has a culture of learning. This suggestion presents a picture in which the responsibility for learning is shared among all the members of the group.

2.2.1 Knowing is embedded in Situated Practices

On the other hand, Araujo (1998:317-336) argues that working, knowing, learning and innovating are blurred activities that are '*embedded in situated practices and are coextensive*'. Learning, knowledge and practice seem to be a triplicity with subtle relationships. Some viewpoints which are suggested by constructivist (e.g. Bedar, et. al. 1991:88-101; Jonassen 1991:5-14) and situated perspectives on learning (e.g. Collins, et. al. 1989:453-494; Lave & Wenger 1991) highlight dynamic angles of the knowledge process. Based on negotiable interactions, people build their own representations of knowledge and at the same time help other members in the group to understand the context, the content and the process of the knowledge. This viewpoint is echoed by scholars such as Roth (1996:179-220), Squire and Johnson (2000:23-43), and Barab and Duffy (2000:25-56). Knowledge is situated in experience, so that the focus of learning is on the interplay between the roles, tools and processes coming out of interactions.

2.2.2 Shared Practices Trigger Learning

Ideas such as the above reflect what Lave and Wenger (1991:98) refer to as '*...a set of relations among persons, activity and world, over time and in relation with other tangential and overlapping CoPs*'. Lave and Wenger's (1991) analysis seems to focus on the processes and influences of interactions. Engaging in interactions may lead to the result of gaining knowledge, and moreover the established knowledge can also trigger further interactions. If we view situated learning as a means, by way of interactions, to acquire particular knowledge, the concept of CoPs is for the purpose of improving one's grasp of a particular field of knowledge and also exploring one's own view of the interactions. The essential feature of communities of practice is members' shared practices, which relate to their comprehension about some important

interactions for themselves. Since it is based on members' participation rather than on official status, people's forms of interaction within the community are liberal. Although their practices may be inevitably affected by some official influences, such as organisational policies or regulations, members in the communities interact with these influences through their mutual practices and by themselves.

2.2.3 Acquiring Knowledge, Authorising Power and Integrating Resources

Lave and Wenger (1991) did research on groups which engaged in craft-related occupations, such as midwives, tailors, butchers, and so on. They then coined the concept and suggested that learning is embedded in the process of communities of practice. Through mixing newcomers with senior practitioners, associating individual experiences with the group's daily lives, marginal participators can not only be accepted as members, but also receive and contribute their knowledge to the community. This is what Lave and Wenger (1991:56) refer to as 'Legitimate Peripheral Participation' (LPP). Members engage in their practices and learn from old-timers, so that they move from peripheral to full involvement in the community (Hildreth, Kimble and Wright 2000:27) . Through this, a newcomer will gradually be accepted by the group and acquire his or her identity in the social world (Brown and Duguid 1998:90-111). Legitimation, peripherality and participation are indispensable elements and processes. Legitimation distinguishes insiders from outsiders, which highlights the formal or informal authority of the group (Stacey 1996:46). Only when the newcomer is recognised as a member of the group can his or her participation become possible. Peripherality identifies members' degree of participating in the interactions (Brown and Duguid 1998:90-111). Therefore, the process of participation includes, in Lave and Wenger's (1991) view, improving knowledge, authorising power and integrating resources. For Lave and Wenger (1991), communities appear not only

to be an effective way for organisations to share knowledge outside of the traditional structural boundaries, but also to understand what interactions are and what they mean for the community and outside of the community.

2.3 Some Features

There are a number of key features in this description which enable us to give an outline of the concept of CoPs. These features include the community, the domain of knowledge and the practice. As well as identifying some basic elements of a community of practice, these also imply some subtle conditions which may determine the forms of interaction.

2.3.1 The Community

The idea of community in communities of practice highlights the "social fabric of learning" (Wenger, McDermott and Snyder 2002:28). It shows a structure within which interactions and relationships are fostered. In other words, a community is a social structure where similar interests, common practices and sets of relationships will develop.

2.3.1.1 A Social Structure

The concept of 'community' in the term 'communities of practice' does not necessarily indicate a geographical community nor an interest group, but is associated with particular social structures. Some scholars place emphasis on the word 'community' and suggest a harmony, order and coherence process (for example, Kofman and Senge 1993:5-23). Some view this concept from the angle of 'practice' and focus on an intertwined, sustained and perpetuated process (for example, Gherardi et al., 1998b). It seems to me that the concept of community in this field is not purely a geographical

entity or a code on a group of people. The community appears to be an organism which can develop by itself. A core group of participants provides the group's intellectual and social leadership, which enables the members in the community to locate themselves with expertise, to discover others with similar experiences, to record methods and artefacts that have been developed, and to identify outside challenges that can help create new knowledge. Davenport (2001:61-75) analyses three on-line communities of practice from the views of situated learning and situated action and highlights the importance of social structure. In her opinion, it is the social structure which fosters the two activities (situated learning and situated action) so that the individual and the community contribute to each other.

2.3.1.2 Similar interests, common practices and a set of relations

The concept of community also implies that people with similar interests and goals are bonded together. A community is a social fabric, which makes these varied resources cohere. Within the group, they implement common practices, tools, and languages to achieve a common goal and also to pursue their respective interests. Switching between the common practice and personal interests, new understandings emerge.

From the angle of community, some scholars argue that a learning community provides members with social functions, so that people in the environment are able to engage in some knowledge interactions. For instance, following Penrose (1959), Nelson and Winter (1982), Kogut and Zander (1992:383-397) and Fransman (1995:713-757) suggest that organisations' structures of co-ordination defines the social context for co-operation, communication and learning, by which its knowledge is created. In their opinions, the organisation is a container of knowledge and one of its purposes is for creating and integrating knowledge (Grant 1996:109-122, Tsoukas

1996:11-25). According to Eckert (1993), a community of practice presents a set of relationships among individuals and activities, over time and in relation to other overlapping communities of practice. Thus, it seems that the social context, embracing common interests, structures and relations, brings diversity and uniqueness together, so that people's practices within the community are mutually affected (Reynolds 2000:77-79). Different practices of engagement reflect different community knowledge and its learning capabilities (Lam 2000:487-513), so that the community has a rich foundation to develop itself.

2.3.1.3 Individual learning and organisational knowledge

Simon (1991:125-126) suggests that all learning takes place inside the individual's head and individual learning in organisations is a sort of social process. The community, the organisation, actually provides its members with a place as well as motivations to make them enjoy sharing ideas with others. Kim (1993:40) views the organisation as a place where the individual's learning takes place and he explains how the individual's knowledge is converted into organisational learning. He borrows the concept of learning process, which derives from individual learning, to interpret the conversion from individual knowledge to organisational knowledge. As such, the organisation interacts with those key persons whose knowledge is closely related to organisational changes. From the angle of business management, organisational learning is for the purpose of adjusting the organisation to changes in the market (Reynolds and Ablett 1998:26-27). However, when the organisation interacts with knowledge holders, it is actually sharing knowledge with people all over the organisation. Interacting with knowledge on an organisational level is not like reading a book, which is a one-to-one model. The knowledge is actually infused into the

organisational culture, so that each member in the community is more or less sharing the influence of the knowledge.

2.3.1.4 What does this concept mean with respect to this study?

The concept of 'community' in the term 'communities of practice' seems to highlight a particular social structure which enables mutual engagements to be developed. In my opinion, this idea also implies that knowledge creation can happen in any type of organisation as long as the particular social structure keeps working in the environment. In other words, communities of practice can be discovered everywhere, even in a bureaucratic organisation such as the TPG. This idea provides, in my opinion, public servants' learning with a hope of survival, especially when most people criticise the bureaucratic organisation as sluggish (interviewees, such as Mr. J, Mr. X and Mr. S, held this opinion). In this research, I highlight some features, discovered in the TPG, which echo the concept of CoPs. Examining these features, I try to create common ground for both the situations (communities of practice as well as the learning situation in the TPG). This idea also enables me to reflect on my established understandings about both of them.

The idea of community in the concept of CoPs implies a group of people who have shared interests and voluntarily join the community. Not only do they share common practices, but they also tolerate differences. In these circumstances, one's value system becomes crucial, and determines whether or not particular interactions continue or stop. However, the concept of community also implies individuals being accepted by the group. Because individuals are recognised as members of the group, their individual value systems will gradually be integrated into the community by way of continuous practices. Some cases in this study indicate that one's value system can be

affected by some ongoing interactions in the organisation, while shared practices can also be modified by particular persons' value systems.

Once the individual has the motivation to join in a community, knowledge sharing and storing become important. Both of the functions enable the community to develop as a self-organising organisation. Knowledge sharing depends on whether or not the organisational culture can facilitate formal and informal networks. Knowledge storing is contingent on whether or not the community has mechanisms by which scattered knowledge can be integrated into the organisation. Both of the functions can be found in the TPG. This study also tries to find keys that enable the functions to work efficiently.

Knowledge sharing and creation in a community depend on members' mutual engagements. The concept of mutual engagement implies a dynamic process of interaction. From this point of view, members adjust themselves to the organisational culture, in order to interact with other colleagues and with the shared practices. The shared practices, which are similar to the concept of official business in the TPG, enable the community to collect different resources together, so that different ideas can be merged into the established knowledge of the community. Additionally, because it is a mutual process, other people's views about people's attitudes will also influence their desire to join the interactions. This reasoning reflects the three adjustment factors which will be introduced in later paragraphs.

2.3.2 The Domain of Knowledge

The concept of community highlights the idea of social structure, while the term "domain" implies some shared content which enables individuals to identify

themselves as members of the community. According to Wenger, McDermott and Snyder (2002:27), "*the domain creates common ground and a sense of common identity*". The common ground allows members to share their purposes, their resolved issues as well as other open questions. These shared practices bring members together and also facilitate their learning (Wenger, McDermott and Snyder 2002:30-31). According to Yi (2002:108), one major purpose for forming a community of practice is to increase opportunities of knowledge sharing by way of developing social relationships. The idea of domain of knowledge implies many meanings. Firstly, it highlights the desire to exchange knowledge. Secondly, through engaging in shared practices, members' sense of identity, values and behaviours are also shaped.

As regards the above meanings, I will start by identifying the meaning of knowledge in the concept of CoPs. I will then explore how working on knowledge enables members to form shared practices, and how the domain of knowledge contributes to the development of the community.

2.3.2.1 What is Knowledge?

Knowledge is different from information, because knowledge implies the process of learning. Learning is a process which is extremely personalised. We do not know whether the students in a classroom, sitting on a chair, and listening to a lecture are engaging in learning. We may ask them to take an examination to see whether or not they have learnt, yet we do not know which activities (if any) during the process of teaching cause their learning. Since learning is so personalised, the knowledge which the individual gains through his or her learning process is relative. One's knowledge is only other people's information, because the other people do not experience the learning process. From this point of view, documents that record others' experiences

are merely information for me. Only when I read them through and produce my own conclusions, can the knowledge be constructed. Some scholars, such as Sierhuis and Clancey (1997), suggest that knowledge cannot be discussed without considering the knowledge holders and the environment where the holders are. Because knowledge is such a personalised concept, the development of knowledge relies on people's regular use of knowledge. Using knowledge implies the concepts of sharing knowledge, creating knowledge and storing knowledge.

2.3.2.2 What type of knowledge am I talking about?

Wenger (1998a:69-71) points out the importance of tacit knowledge, and indicates that most knowledge processes embedded in group activities are invisible and hard to convert into an explicit form. Gherardi and Nicolini (2000:7-19) use the concept of CoPs as a heuristic tool to illustrate the role of tacit knowledge during the process of interaction.

In order to highlight some ignored parts of knowledge processes, some scholars divide knowledge into two forms. For example, Kimble, Hildreth and Wright (2001) divide knowledge into hard knowledge and soft, which indicates that some knowledge cannot be codified. Brown and Duguid (1998:90-111) suggest know-what and know-how, and point out that both types of knowledge refer to specific issues. Polanyi (1958, 1966), Nelson and Winter (1982), Spender (1996:63-78), Nonaka and Konno (1998:40-54) distinguish between explicit and tacit knowledge and try to explore the interactions between the two modes of knowledge in order to identify some patterns to interpret knowledge creation. Lam (2000:487-513) uses three levels – the cognitive, organisational and societal levels - to review the role of tacit knowledge in

organisational learning. She suggests that the knowledge of the firm is socially embedded and rooted in firms' co-ordination mechanisms and routines.

Scholars such as the above identify the significance of tacit knowledge and try to reveal the myth of knowledge creation in terms of the social and interactive nature of learning. In communities of practice, because members' practices are strongly related to their interactions with knowledge holders, tacit knowledge is relatively important when this topic is discussed.

2.3.2.3 Knowledge and shared practices

According to Krogh (1998:133-153), knowledge within an organisation is based on situated experience and is constructed by members' interactions and organisational cultures. Because people's ongoing interactions shape the group culture as well as its practice, common ground is gradually formed (Carotenuto et al 1999:2). The idea of "common ground" is important. According to Scharmer (2001:81), "*Distributed work does not create community. Shared experience does*", "*Abstract discussion and the mere transaction of speech acts do not create community. Shared reflection on common experiences does*". This common ground, including shared language, symbols, methods or stories, becomes a "shared repertoire" (Wenger 1998:82-84), which not only facilitates knowledge sharing but also binds members together. However, even though shared repertoires enable members in the community to share insights quickly, they cannot guarantee that members always enjoy working together. On this point, Brown and Duguid (2001:54-55) argue that interdependent practice is the key to developing shared identity. The idea of interdependence, which is related to the concept of community, provides members with a motivation to work on particular knowledge domains continuously.

2.3.2.4 Cultivating development

Being accepted and a deep involvement in shared practices are keys by which a newcomer gradually becomes familiar with the necessary skills to get into the core of the community. In other words, a community has its own authority to affect members' interactions. However, these interactions sometimes result in asymmetries of power, so that some dark parts, such as '*limitations in relation to difference, the oppressive aspects of conformity and the obstacles to participation*' (Reynolds 2000:71) may be discovered in a community. In order to sort out these problems, an open community such as a community of practice exposes itself to a struggle between order and disorder, and tries to integrate diversities into the system. On the one hand, because members in the group may not necessarily belong to one group, but are involved with varied memberships (Easterby-Smith, Snell and Gherardi 1998:259-272), outside constraints or directives can affect people's interactions and so influence the development of communities of practice. On the other hand, members' mutual interactions are still triggered by the community itself (Miao, Fleschutz and Zentel 1999). This process also provides the community with varied possibilities of development. Through members' participating in practical interactions, different insights are shared among members so that the community can find particular knowledge to develop and particular ways to go.

2.3.2.5 What does the domain of knowledge mean with respect to this study?

The concept of domain in communities of practice enables me to understand why people want to join in the community, how their common ground and shared practices are shaped and what the role of knowledge is. The concept provides me with an

opportunity to compare people's interactions in the TPG with that in a community of practice.

In a way, individuals' lives in the TPG are similar to those in a community of practice. The particular culture shapes members' particular ways of interacting. They are all qualified and selected by a common examination system. Based on their similar background, they can communicate with each other easily. Because it is a big organisation, it has developed many routines to sort out basic problems in its daily operations. From the viewpoint of LPP, a newcomer in the TPG is recognised as a member by way of passing the national examination. He or she is then involved in organisational routines. Through asking old-timers or studying archives, the individual gradually understands the necessary skills and gets involved in the system. Although I cannot define the TPG as a community of practice, their shared features interest me in exploring people's interactions so as to contribute to both the theory and the TPG.

According to Millen and Muller (2001), through largely voluntary social networks, people show their thoughts about sharing information, resources and expertise with one another. Eraut (2000:16) highlights the importance of identifying different types of situations so that tacit and explicit knowledge can be shared in appropriate contexts. In an open environment such as a community of practice, because people's thoughts can be juxtaposed in front of all the members, people may understand their positions in the community and start to compare themselves with others. This also enables them to determine what they really want and what they already have as well as how to acquire appropriate resources to achieve the target.

Through identifying their positions in the group and making comparisons, people may find some linkages between their thoughts and others'. These linkages can be either something in common or particular different items. Using these linkages, participants practise their skills of observation, reflection, conceptualisation and application. From this point of view, knowledge creation and sharing, which are based on making comparisons and establishing networks, implies that the individual's influence may elicit other members' learning practices.

2.3.3 Practice

According to Wenger, McDermontt and Snyder (2002:29), "*the practice is a set of frameworks, ideas, tools, information, styles, language, stories, and documents that community members share*". In previous paragraphs, I have argued that the concept of community bound members' actions together, and the concept of domain creates something in common in the group so that knowledge can be understood and shared all over the community easily. However, in terms of practice, what do people do in these circumstances? And what does the knowledge which is derived from members' interactions mean in terms of their practices?

2.3.3.1 What is "Practice"?

Liedtka (1999:5-17) believes that participation in doing and sharing of understandings about the doing are essential items in forming a community of practice. The term "Practice" in communities of practice implies a set of shared meanings, which enables the individual to foster a sense of mutual trust and obligation (Lesser and Storck 2001:831-842). According to Wenger, McDermontt and Snyder (2002:39), "*The practice includes the books, articles, knowledge bases, Web sites, and other repositories that members share. It also embodies a certain way of behaving, a*

perspective on problems and ideas, a thinking style, and even in many cases an ethical stance". It looks as if practice is a set of shared items, and that it provides individuals with a basis to interact with the environment to solve problems and acquire knowledge.

2.3.3.2 To make practice visible

There are some ways of making practice visible. Story telling is one method, and documenting performance is another. Shared stories enable knowledge and insight to be disseminated quickly and clearly within the organisation, while outsiders may feel them to be opaque (Brown and Duguid 2001:52-53). Documenting performance, such as a "Learning Log" (Teare and Dealtry 1998:55) or "Learning History" (Kleiner and Roth 1997:152-165) is a method of keeping particular interactions in the organisation. Thus, shared repertoire has been embedded in different resources in the community. Engaging in shared practices, members in the community actually experience a process of gaining group acceptance, making comparisons, establishing networks and exchanging knowledge. In these circumstances, knowing and practising share a subtle relation so as to influence people's interactions in the community.

2.3.3.3 What is the relation between practice and knowledge?

Knowing is, in terms of communities of practice, the essential part of the concept of practice. Not only is the purpose for members' engaging in shared practices to acquire knowledge, but also the process of doing so will lead to knowledge sharing. Knowledge, in communities of practice, is much more a living process than an object, because it is integrated in the doing, social relations, and expertise of these communities. Such communities do not take knowledge in their speciality to be an object, since it is a living part of their practice even when they document it. Knowing makes the community engage in the process of creating, refining, communicating, and

using knowledge in its unique way. In this situation, knowing becomes an act of participation and learning is intertwined with community memberships, so people organise their learning around the social communities to which they belong.

Learning does not only identify what the people belong to, but also adjusts members' rankings and influence in the group. When people change their learning, their relationships to and identities in the group are also different. People's interactions and their learning patterns are strongly intertwined with organisational contexts. Communities of practice can then well represent the social structure for the ownership of knowledge.

2.3.3.4 What does this concept mean with respect to this study?

Individuals' practices are influenced by the community with which he or she interacts. On the one hand, based on the ongoing interactions, some symbolic rites and material artefacts are developed, which enable individuals to modify their mental content, behaviour and actions (Gherardi and Nicolini 2000:7-19). On the other hand, Nelson (1991:61-74) and Tsoukas (1996:11-25) suggest that organisational knowledge resides not in the heads of individuals, but in ongoing interactions where individuals share their experiences with each other. Shared practices bring various resources together so that new ideas may develop and so challenge the routine practices in the organisation. Suggestions such as the above point to the importance of interactions.

In the TPG, the archive system plays an important role in helping newcomers to understand basic performances of the organisation. Sets of routines also guarantee the system against particular waste from haste. What, though, is the meaning of those shared practices which derive from members' daily interactions in terms of knowledge

sharing and creation? According to Conner (1998:20), some conflicts may happen during the process of considering what should be done and how to deal with it. Within an environment having a strong influence of routines, how do the individuals in the TPG adjust these conflicts to improve their understanding?

Learning from the community's customs and rituals, participants gradually gain skills and understand the community (Graham, Osgood and Karren 1998:34-38) as well as their own positions in interactions. By way of participating, individuals also understand the market in knowledge and how to access the resources they want. At the same time, the community identifies new ideas that the participants propose, so that the community can expand its knowledge structure as well as its networks.

2.4 Basic Elements and Adjustment Factors

Discussions such as the above seem to suggest that the concept of CoPs is one that bridges individual learning and organisational learning. Because of the community's domain of knowledge, people in the group have common ground to integrate diverse resources so as to identify the meaning of their actions. Because of the concept of community, people recognise that there is a social fabric which enables individuals to foster their interpersonal relationships and to encourage a desire to share resources. Because of the consensus of practice, interacting with members becomes a catalyst by which the idea of knowledge domain and the concept of community can be developed. The concept of CoPs provides me with some angles to explore people's interactions in the TPG. This is also a starting point for structuring my interview schedule (Appendix 1). However, the findings of this research do not totally reflect the idea of CoPs. The findings which derived from data highlight particular issues which are not specifically discussed in the field of CoPs. In order to draw academic thoughts and empirical

evidence together, I view people's interaction, in terms of learning, from the following angles.

Firstly, because a community "*fosters mutual respect and trust*" (Wenger, McDermontt and Snyder 2002:28), people in it take advantage of formal and informal networks to facilitate knowledge sharing, to go through practices and to link with other communities. Networks provide chances for engaging in knowledge exchanges. Following the process of exchange, some markets in knowledge emerge, which does not only point to the power of the group, but also forms the knowledge domain of the community. The domain provides members with common ground, in which shared culture and practice are cultivated. The power and the knowledge domain interact with each other, so that a common identity becomes obvious.

Secondly, in order to access the common identity and to be accepted by the group, individuals make comparisons between themselves and the other people in the group. Following the process of making comparisons, they may realise the differences between their self-expectation and the group's orientation. In order to keep themselves in the group, individuals try to minimize the differences so that they attempt to establish good interpersonal relationships and to exchange useful knowledge in order to make themselves comfortable in the community. Situations such as these seem to indicate that there may be some elements which build relationships of interaction, bind members together and also construct the community's own knowledge.

2.4.1 Four basic elements

The above reasoning indicates, it seems to me, that the knowledge that people have gained through their experience of interactions was not necessarily some professional

knowledge, but such that may benefit their further interactions. Knowledge, at that moment, becomes a catalyst to trigger interactions, and so to evoke further knowledge. The knowledge includes how to gain the group's acceptance, how to know the gap between self-expectation and the group's identity through making comparisons, how to establish interpersonal networks in order to sort out problems and how to exchange knowledge in order to gain power. The four sorts of knowledge, which I name four basic elements, are discovered again and again in the data that I collected. In this research, I will reveal how I discovered the four elements and what these elements mean in people's interactions and in regard to the concept of CoPs.

2.4.2 Three adjustment factors

However, in some groups, the interactions between the four elements are not obvious, because they are still affected by other factors, such as meaningful feeling in one's mind, official business and the individual's attitude to interactions. I call these factors adjustment factors, and they will be discussed in chapter 8. One's meaningful perception in one's mind, which derives from one's value system, determines the quality of interactions, and at the same time keeps members participating in official business. Because people need to engage in official business in order to build connections with the organisation, official business becomes the bridge that collects members' efforts together and also brings different views to the organisation. During the process of dealing with official business, some conflicts may occur, which enable the individual to reflect on his or her established knowledge. Dealing with the conflicts between different viewpoints also shows what attitude the individual holds to facing difficulties, as well as what the other colleagues' view is about the individual's attitude. One's attitude and the other people's view on this attitude then affect the results of knowledge sharing.

Many scholars suggest that the concept of CoPs is a key to bridging organisational learning and knowledge management. Many of them view the concept in a positive way, and so do I. However, a good concept cannot guarantee a good result, especially when the result strongly relies on people's interactions. In order to know more about people's interactions, and the elements and factors which are derived from interpersonal interactions, I carried out the research. The four basic elements include gaining group acceptance, making comparisons, establishing interpersonal networks and engaging in exchange. The three adjustment factors embrace one's value system, official business and one's attitude. This research will use these seven ideas (four basic elements and three adjustment factors) as a framework for understanding some informal learning networks in the TPG. The focus of the informal networks is not on individuals' learning patterns, but on the influence of the elements on knowledge creating and sharing. The purpose in doing this is the hope that some reasons can be found to explain human beings' interactions within a community. The findings of this research may enable people to reflect on the concept of CoPs and to understand why this concept has not always been efficacious as a tool for improving organisations in the real world.

Chapter 3

Methodology

3.1 Introduction

The aim of the research is to understand, through fieldwork, how and why the concept of communities of practice (CoPs) identified in the literature may be applied within the context of organisations. Initially, the researcher attempts to extract some elements referring to learning and knowledge from interactions in organisations; subsequently, by integrating the elements, the researcher tries to examine the relations between these elements and the concept of CoPs in order to provide a clearer insight into it.

In the previous chapter, the reasons for choosing the topic and the relationship between the various elements and the concept of CoPs were introduced. The focus of this chapter will be to detail how and why the researcher adopted certain research methods to undertake fieldwork. This Chapter will initially illustrate the theoretical basis that underlies the research design, then it will provide a review of the relevant literature, fieldwork methodology and the tactics utilised in approaching interviewees.

The purpose of this chapter is to present the research process underlying this study. This process includes the designing of the research agenda, the evaluation of different research methods, the first approach to interviewees, and an attempt to contribute to the body of theory in this field. There are three issues that will be discussed in this chapter: ways of thinking about reality, methods for accessing data, and some reflections on those two aspects.

Methodology can be viewed as a bridge that links the researcher's thinking with reality. Dichotomies, such as quantitative versus qualitative, objective versus subjective, positivistic versus phenomenological or structure versus action have been proposed in order to help people understand methodology. Quantitative research is concerned with the collection and analysis of data in numeric form (Blaxter, Hughes and Tight 1996:61) in order to establish general laws or principles (Burns 2000:3). Conversely, qualitative research does not specifically focus on numeric analysis, rather it explores smaller number of instances in order to gain an insider's views of the field (Burns 2000:13-14). Both methodologies are about dealing with reality.

Based on different views of the current situation, the researcher chooses different methods in order to cope with research problems. According to Harvey, MacDonald and Hill (2000:17-19), '*Theorists make decisions about whether society can be treated as a reality that is external to the individual or as a reality that is socially created by the people who make up society*'. It is researchers who make decisions about how to deal with research issues, and the decision may rely on their personal views of the research event. For example, quantitative methods may be used because the researcher believes that certain social events are objective and external to the individual. Qualitative methods may be adopted when the researcher thinks that reality can only be seen in contexts which are natural and cannot be predefined or taken for granted (Ely, et al 1991:4). Thus, it would seem ultimately that the decision-making process is intrinsically linked to the personality of the researcher. Accordingly, it may be more important to identify the presuppositions and theories which reside within the researcher than to pursue the debates over the validity of either quantitative or qualitative or objective versus subjective. Personal prejudice and notions of logic which are particular to an individual researcher also dictate the choice of methods used

to collect data and the processes adopted to construct arguments, as these are essential foundations for framing the research.

3.1.1 Methodology

According to Harvey, MacDonald and Hill (2000:14), methodology denotes not only the strategy which the researcher intends to adopt whilst collecting evidence, but it also entails a rationalisation of why he or she collects data in that way, which involves explanations, interpretations and understanding the researcher's purpose and strategies. Some scholars, such as Wilson (2002), argue that a researcher's methodological approach reveals his or her views on the nature of reality. However, there are several ways of dealing with this assertion. Some researchers deal with the first part, which refers to collecting social facts in order to build up a picture of one facet of reality. For instance, Chang (2002) interviews relevant employees in the Taiwan Provincial Government in order to examine the implementation of the policy of public servants' rights protection. Based on his exploration, he constructs his argument in order to give suggestions for improving the policy. On another level, Lin (a) (2002) tries to establish an integrated theoretical framework based on business strategy perspectives in order to combine knowledge management and business strategy. Other scholars may try to modify the established model in order to make the research conform to reality. For example, Lin (b) (2002) uses the concept of learning organisation to examine two secondary schools, and finds some features which can be used to adjust both the concept and school operations.

Some questions are about matters of ascertainable fact, so that the researcher can test the hypothesis in order to explore reality. For example, Chen (2002) uses Giddens's structuration theory as a framework to examine a car company in Taiwan in order to

analyse the interactions between members, supervisors and the organisation in terms of knowledge management. All the above investigations are related to reality, yet different research methods have been applied because of their different purposes. Additionally, because it is the researcher who uses the research method, the selection of certain methods also depends on the researcher's personal factors such as his or her expertise and judgement. The choice of methods is based on the researcher's belief about the most appropriate way of achieving the objectives of the research. Therefore, the belief is actually related to the researcher's attitude to accessing reality and his or her interpretation of it.

3.1.2 A Human Artefact

From the angle of social phenomena, reality itself may be a sort of human artefact that can be conveyed through the medium of interpretation (Boland and Day 1989:87-104). It can also be viewed as the result of negotiations between researchers and those who are subjects of research. There might be no single reality, which enables one to judge a final truth, because information often conveys a multiplicity of meanings that enable people to perceive different possibilities to reality. However, the meanings might also be constructed within the environment of sharing knowledge, whereby researchers and researched can share their experiences with each other.

However, social constructionists hold a different opinion. They believe that no objective knowledge can be obtained through interviews because both participants create and construct narrative versions of the social world, which are context-specific and invented to fit the demands of the interview (Miller and Glassner 1997:99). In my opinion, adopting interviews as a method should not be done for the purpose of gaining specific knowledge, but rather for the sake of constructing knowledge through

sharing interactions. The process of constructing knowledge includes choosing and using research methods, theorising findings and reflecting on established knowledge.

3.1.3 Constructing Knowledge

Constructing knowledge is an important concept in this study. This concept not only provided my motivation for conducting this research, but it also influenced my choice of research method. For instance, the reason for my choosing the concept of CoPs as a theory to criticise is partly due to my interest in knowledge sharing as theory, and partly the result of my desire to gain some practical information by tackling real interactions. Through carrying out interviews, I have realised some limitations to current theories and understood how difficult it is to theorise about a set of incomplete and tentative findings. Through repeat practice, the interview method becomes, for me, one of the channels to connect with the outside world.

Interviewing is a process by which the interviewer and the interviewee share and construct their world together (Schofield 2002). The information from interviewees is actually restructured, because the interviewee may evaluate the interviewer's situation to express his viewpoints. In this situation, the information that the interviewer gathers has been subjected to a process of reflection and communication (Jensen 1991:32). Through this process, the information can then be comprehended by and become meaningful to both the interviewee and the interviewer (Mishler 1986). Therefore, an interview is an interaction which is not only, or perhaps not even, for the purpose of approaching an objective reality but also for creating a shared meaning during the ongoing process (perhaps not even) (Vaughan 2002). During the process of dialogues, viewpoints that derive from researchers and from interviewees are juxtaposed, so that

both parties have a chance to compare their views with each other in order to reflect on their established knowledge.

3.1.4 Prejudice

Based on this point of view, prejudice may not be negative at all, but could in fact be seen as positive. Prejudice that derives from established knowledge provides one way to understanding reality, because it unfolds the individual's views of events (Jones 1995:4). However, it is still not enough to explore reality only through sharing of prejudices. To reveal reality, the researcher not only applies established knowledge to conduct the research plan but also doubts and criticises recognised knowledge (Janesick 1998:120). Questioning the purpose, the means and the results, revealed knowledge can then be repeatedly examined, so that reality is gradually unravelled (Basden 2002). Working positively with received wisdom but making a conscious effort to reflect on it and challenge it become important ways to approach reality. I use the word 'approach', rather than 'capture', because reality is, in my opinion, not obtainable but only approachable. Because reality is sometimes embedded in changeable situations, it is usually elusive when we try to capture it. My strategy to 'approach' it is by way of interview, which leads the interviewer and the interviewee to share their respective views (prejudices) in order to stir up their reflections on reality. In this situation, the researcher, the interviewee and reality interact with one another. Reality may not be reachable but joinable.

3.1.5 Fusion of Horizons

Gadamer (1979:302-306) believes that a researcher can close in on reality through the 'fusion of horizons'. During the process of discourse, both the interviewee and the interviewer exchange their established knowledge, share their prejudices and also

reflect on their experiences. Accordingly, prejudice is unavoidable, because it is a base for continuing the process of understanding. The process starts from prejudice, but it also reflects on it. Understanding implies a process of continuous criticising and constructing. The journey of exploring reality becomes then an unremitting practice of re-questioning and re-examining. A new knowledge that derives from both established knowledge bases but is different from those original ones then emerges.

Based on the conviction of sharing knowledge and the preference for 'fusion of horizons', I chose the concept of CoPs to study and design this research in a qualitative way. In the previous chapter, I have already discussed some scholars' arguments about the concept of CoPs, and also pointed my strategy for this developing topic. In order to identify some significant features of people's interactions, I propose to use case studies.

3.2 Research Method

For this research, I study some elements of people's interactions within groups in order to highlight some aspects of the concept of CoPs. This research does not intend to manipulate any variables, but instead, it aims to obtain a slice of what individuals in the TPG perceive and interpret their interactions with their groups in the face of the impact of downsizing. According to Yin (1994:23), if the focus of research is on a contemporary phenomenon within some real-life context, the case study method will be a suitable choice. Accordingly, the case study method will be adopted in this research, because it allows the researcher to retain the meaningful characteristics of real-life events.

3.2.1 Case study

Different research methods enable the researcher to reveal diverse facets of reality (Devine and Heath, 1999:12). For example, using a literature research method enables the researcher to grasp background information on reality and also to know what current researches have been undertaken. Using the semi-structured interview method allows the researcher to ask a series of linked but open questions, in order to obtain as much subtle detail as possible about activities or perceptions (Harvey, MacDonald and Hill 2000:18-21). The case-study approach gives, within a limited time scale, opportunities for one aspect of a problem to be explored in depth (Bell 1999:10). Yin (1994:1) suggests that case study can be viewed as a research strategy that allows the researcher to apply methods, in order to achieve the research purpose. From this point of view, it seems that case study, following Yin's (1994:14) suggestion, involves a set of research methods and plans and has its own logic in the collection and analysis of empirical evidence. Even though Yin (1994:3) does not agree that case study should be only viewed as a hierarchical tool that is specific for the exploratory phase of an investigation, he and Platt (1992:17-48) both suggest that case study is a good approach to achieve an exploratory purpose.

Burgess et al's (1992) use of the case study method to explore resource allocation in Sheffield schools, in order to raise some issues and questions that are common to all case studies provides one illustration of the preceding argument. In my opinion, research purpose is one thing, yet research method is another. One of the keys that connect the purpose with the method is research issue. Harvey, MacDonald and Hill (2000:14) point out that the issues that the researcher is interested in and the things he or she is trying to find out will affect the decision of choosing research method. Yin (1994:9) particularly suggests that case study is a specific strategy for asking "how" or

"why" questions about contemporary events, when the investigator has little or no control over these events. This suggestion reflects the research questions of this study and also provides a method for dealing with the learning interactions under the impact of the downsizing policy in the TPG.

One reason for my decision to adopt the case study method was that the topic that I focus on required an understanding of relationships between individuals within groups, the groups themselves and the knowledge derived from their interactions. So, what I tried to deal with was the relation between phenomenon and context. I had thought about using other methods to achieve the research purpose. Using life history or historical method can reflect the relations between the phenomenon and the context, yet this strategy focuses on events that happened in the past. What I wanted to explore were people's ongoing interactions, which may be inevitably affected by their past life but which are also engaged in an ongoing dialogue with the environment and the interviewees' everyday activities.

Furthermore, using surveys would have enabled me to understand the relations between the phenomenon and the context (Yin 1994:13), yet too many limited variables might have also limited the depth of probing. Using grounded theory would have allowed me to immerse myself in the data (Glaser and Strauss 1967) and enjoy analysing unstructured data, yet it would have required a long time to undertake fieldwork and engage in the systematic coding procedures (Strauss and Corbin 1990), so it was less possible for me to adopt this method. Therefore I was in a quandary: I would have liked to explore in depth, yet I lacked the time to engage in fieldwork. I designed this research as a form of case study in order to allow myself to focus only on

small-scale groups. Based on this thinking, some reasons for my adopting case study method are as cited below:

- The rationale of this research is to explore individuals' learning interactions within the context of organisation, so it is necessary to find an appropriate organisation to research. In this situation, using case study methodology is necessary.
- Case study method cannot only present the real-life situation of practical implementation, but also enables me to realise the limitations of my assumptions. For instance, some sort of interactions can only be found in certain cases because of their particular circumstances. Some interactions are found to be very common, yet each case has its individual features. The shared interactions and those unique activities can then help me understand more about people's lives and the context in which they are located.
- Some other factors which lie outside my original reasoning but are important for constructing my argument might come out through the process of case analysis and so can be used to strengthen my conclusion.

Cases are not constructed by something out of nothing, but are structured by a theoretical framework. The theoretical framework in this study derives from reviewing current literatures.

3.2.2 Literature Review

In order to guide data collection and analysis, I reviewed the development of theoretical propositions such as organisational learning, the learning organisation, human resource development and knowledge management. Reviewing these subjects

enabled me to develop research questions essential to finding keys and constructing cases.

The purpose of a literature review is to help locate this research in academic scholarship. This may prevent the researcher from repeating previous errors or repeating work which has already been done, as well as giving insights into aspects of the topic which might be worthy of detailed exploration (Blaxter, Hughes and Tight 1996:109). In order to construct cases, to develop research questions and to theorise about findings, it is impossible to avoid reviewing the main debates to be found in the literature. According to my previous experiences, the process of research is similar to experiencing an endless dialogue between established knowledge and reality. For this research, two main knowledge resources construct my original concept of the topic: my past experiences of being a public servant and my knowledge, through studying literatures, about the concept of CoPs and other learning theories.

Based on the continuous dialogue between the original concept and reality, I kept constructing new understandings about the topic and seeking appropriate materials to theorise my findings. Although reviewing literatures might only be a stepping-stone that enables me to get into the research, it also provides clues to formulating an argument. Accordingly, an established knowledge base derived from studying literatures becomes necessary, because it provides an angle to access reality, and also to draw academic thoughts and practical facts together in order to create a base for communication. The established knowledge is borne in the researcher's mind in advance and the process of research triggers some continuously open and critical dialogues between established knowledge and new information. Based on this point of view, the literature review became not only the way to shape the core of this thesis, but

also the key that motivated me to keep reflecting on my understandings. Although the core argument had been formed, continuous criticism of the argument based on the literature review still keeps developing.

3.2.3 Documentary Analysis

I also used documentary analysis as a supplementary method to understand what the government does both for the system and the policy. There are numerous qualitative and quantitative documents published by the government about public servants' rights and protection practised before and during the process of downsizing. These documents may be artificial and partial accounts, which still need to be critically assessed for research purposes (Blaxter, Hughes and Tight 1996:187). However, they constitute an important source for materials which enable an outsider to quickly and roughly understand the policy and some issues arising from its implementation. To do so, I developed my understanding of the downsizing policy and the bureaucratic organisation by way of a comparative analysis of many documents. May (1993:138-139) assumes that documents can reflect and construct social reality and events. I collected many documents for analysing, which included official publications, relevant research, statistical reports and bylaws. Table 3.1 is an indicative list of some of the documents I obtained.

Table 3.1: A List of the Documents Used for this Research

Classification	Documents
Internal Document	Name List of employees (2000, A department) Name List of employees (2000, B department)
Official publications	Adjustments to the Organisation of the Executive Yuan The Restructuring of Taiwan Provincial Government Assessment Framework for Organisation Staff Ranking Efficiency Central/Local Government Coordination Reports
Research writing	Chang M. H. (2002) *The Study of the Civil Servants' Rights Protection Policies Under the Taiwan Provincial*

	Government's Organisational Re-engineering, Master's Dissertation, The Department of Labour Relations & The Institute of Labour Studies, National Chung Cheng University. Lin (a) H. C. (2002) *A Model for Implementing KM based on Strategic Perspectives: An Empirical Study of Knowledge- intensive Industry*, Master's Dissertation, The Department of Information Management, National Chung Cheng University. Lin (b) C. K. (2002) *The Study of Sculpting the Junior High School into the Learning School—Samples Two Learning Schools*, Master's Dissertation, The Institute of Education, National Chung Cheng University.
Statistical reports	Directorate General of Budget Accounting and Statistics Executive Yuan, http://www.dgbas.gov.tw/dgbas03/bs7/effect/score-3.htm National Statistics, http://www.stat.gov.tw/main.htm
Law / bylaws	Central Government Agencies Organisation Basis Law, Draft
Web sites	The Research, Development and Evaluation Commission (RDEC) http://www.rdec.gov.tw/eng/

According to Blaxter, Hughes, and Tight (1996:187), *'Documentary analysis involves the careful consideration of a range of related questions'*. All the above documents that I obtained were published in the last three years and were sufficient to reflect the orientation and the implementation of the policy. This method, according to Maykut and Morehouse (1994:146), allows the researcher to process people through the research, from beginning to end. However, I also acknowledge that documents published by the government might not be accurate and might sometimes be biased, so the method of interview was applied to this research to supplement the analyses.

Some ideas that emerged through reviewing literatures and documents became foundations, which enabled me to develop interview questions. By way of semi-structured interviews, I could enjoy the experience of exploring reality without worrying about missing the research orientation.

3.2.4 Semi-Structured Interview

The method that has been mainly used in this research consists in utilising semi-structured interviews to obtain data. Since the knowledge structure and interaction intentions are deeply rooted in one's mind, which includes social, psychological, conscious and subconscious perception and experience, it is less possible to show this rich content by narrative or documentary papers. Situations such as the above seem to suggest that using literature review and documentary analysis methods is still not enough to investigate people's interaction. In order to approach reality, it became necessary for me to communicate with those being researched directly. Because I was not allowed to conduct observations there, I adopted the interview method through which I could not only discover interviewees' insights but also explore the clues of public servants' learning interactions in the organisation.

Learning interactions for helping to cope with organisational changes are embedded in employees' daily activities. According to Thomas, Kellogg and Erickson (2001:866), learning is very much influenced by social context, which involves '*identifying the social practices and relationships that are operative in a particular context*'. In order to learn more about how the public service system performed, how public servants interacted with each other and how their learning was affected by the system, I interviewed a total of 42 public servants, all of whom were white-collar workers. These interviews were conducted during my pilot study (March 2000 - May 2000) and the main fieldwork (February 2001 - May 2001). Some details of these interviews are shown in Table 3.2 below.

Table 3.2: Details of Interviews

Name	Age	Service years	Title of position	Org.	Date of interview	Remark
Mr. B	33	4	Subordinate	D1	29 Mar 2000	Pilot Study
Mr. A	55	30	Supervisor	D1	15 Apr 2000	Pilot Study
Mr. D	42	14	Subordinate	D1	15 Apr 2000	Pilot Study
Ms. C	35	9	Subordinate	D1	16 Apr 2000	Pilot Study
Ms. B	26	2	Subordinate	D1	21 Apr 2000	Pilot Study
Mr. C	39	9	Subordinate	D2	27 Mar 2000	Pilot Study
Mr. E	48	21	Subordinate	D2	13 Apr 2000	Pilot Study
Ms. D	44	18	Subordinate	D2	5 May 2000	Pilot Study
Ms. E	53	26	Subordinate	D2	5 May 2000	Pilot Study
Ms. A	49	18	Supervisor	D2	25 Apr 2000	Pilot Study
Ms. F	45	19	Supervisor	D3	8, Feb 2001	
Ms. G	39	16	Subordinate	D3	23, Feb 2001	
Mr. I	27	4	Subordinate	D4	6, Feb 2001	
Ms. H	55	28	Subordinate	D4	15, Feb 2001	
Mr. H	49	23	Supervisor	D4	9, Feb; 22, Feb 2001	
Mr. G	46	19	Subordinate	D5	31, Jan; 7, Feb 2001	
Ms. I	45	20	Supervisor	D5	14, Feb; 27, Feb 2001	
Mr. X	40	16	Subordinate	D6	8, Mar 2001	Case 2
Ms. Q	28	6	Subordinate	D6	9, Mar 2001	Case 2
Mr. W	43	20	Supervisor	D6	21, Mar 2001	Case 2
Ms. O	34	9	Subordinate	D6	21, Mar 2001	Case 2
Ms. P	44	19	Subordinate	D6	22, Mar 2001	Case 2
Mr. N	41	18	Subordinate	D6	20, Mar 2001	Case 2
Mr. P	33	10	Subordinate	D7	9, Mar; 30, Mar 2001	
Mr. U	49	25	Supervisor	D8	7, Mar 2001	
Mr. L	37	15	Subordinate	D9	8, Mar 2001	Case 1
Mr. M	36	12	Subordinate	D9	8, Mar; 9, Mar 2001	Case 1
Ms. R	32	9	Subordinate	D9	9, Mar 2001	Case 1
Mr. J	55	30	Supervisor	D9	27, Mar 2001	Case 1
Mr. K	33	8	Subordinate	D9	27, Mar; 30, Mar 2001	Case 1
Mr. R	42	18	Subordinate	D9.	30, Mar 2001	Case 1
Mr. S	48	22	Supervisor	D10	19, Mar 2001	
Mr. O	43	17	Subordinate	D11	6, Mar 2001	
Ms. N	31	6	Subordinate	D12	20, Apr 2001	
Mr. Q	48	22	Subordinate	D13	10, May 2001	
Ms. J	30	4	Subordinate	D13	10, May 2001	
Mr. T	54	28	Supervisor	D14	6, Mar 2001	Case 3
Ms. K	33	8	Subordinate	D14	18, Apr 2001	Case 3
Ms. L	40	15	Subordinate	D14	18, Apr 2001	Case 3
Ms. M	43	18	Subordinate	D14	19, Apr 2001	Case 3
Mr. F	28	5	Subordinate	D14	9, Mar 2001	Case 3
Mr. V	48	26	Supervisor	D15	9, Mar 2001	

According to my previous experience, and because most officials are very busy, applying semi-structured interview techniques to explore the people's interactions has

proven more efficient than using in-depth and structured interviews. Semi-structured interview is found to be more appropriate when a researcher tries to understand the constructs that the interviewee uses as a basis for his or her opinions and beliefs about a particular event or situation (Easterby-Smith, et al., 1991). The aim of semi-structured interview is quite similar to in-depth interview. The purpose of both is to explore reality from the interviewee's perspective. To detect reality, the researcher prepares a fixed set of questions and poses them to the participants in the sample. This allows flexibility in the structure and ensures a smooth flow to the interview because participants can decide which areas relating to their situations are most important and relevant for the researcher to understand and interpret.

By adopting this method, not only can researchers focus on what they wish to explore, but also they become freer to probe beyond the answers in a manner which would often seem prejudicial to the aims of standardisation and comparability (May 1993:93). However, in order to explore interviewees' experiences sensitively, it is necessary to arrange questions skilfully. The interview schedule for this study will be shown later in this dissertation (Appendix 1). All the questions, which I had prepared in advance, were borne in mind during the interviews and asked as occasion arose (Marsden, Oakley and Pratt 1994:135). The purpose for doing this was to try to make interviewees feel free to speak so that they might reveal their experience spontaneously. So, even though this was a kind of semi-structured interview, yet it was similar to doing an in-depth interview.

For interviews in Taipei (including the pilot study), I showed the interviewees my questions one or two days before I actually interviewed them. In order to start the conversation, I asked them to choose one of the questions to answer. Based on their

answers, I raised other related questions in order to continue our conversation and also tried to direct the conversation towards my focus. Since the questions that I gave them were quite open, I could then adjust our discussion according to their responses. Therefore, discussion was not always based on open questions, but sometimes it centred on specific issues. Some questions could be understood by interviewees in certain organisations, yet they might be alien to people in other departments. For instance, an interviewee pointed out that I asked something about the experiences of working with other colleagues. He thought that this was a rare situation for employees who worked in the personnel department, yet personnel officers in other organisations within the TPG gave me very different answers. Sometimes unexpected aspects of the topic would emerge. For example, some mentioned weaknesses in the bureaucratic organisation. My understandings about the system derived from the conversation, then, became a foundation to elicit and to continue dialogues in other interviews.

Conducting a face-to-face interview can be viewed as a process of observation (Arbnor and Bjerke 1997:225) and interaction (Maykut and Morehouse 1994:82). Because I was not allowed to observe their practical interactions, I could only try my best to note down what I had seen and had listened to during the process of those interviews. All the interviews, which were between 60 and 90 minutes in duration, were tape-recorded and transcribed before being categorized and subjected to analysis. In addition, some conversations which exceeded my expectation were held. According to Shipman (1981:95), informal conversations can probe deeper, can be adjusted to circumstances, and can increase rapport and cooperation. In order to focus on the subjects of those interviews, I prepared some topics in order to continue dialogues. During those interviews, I started with questions that I had prepared in advance in order to evoke subsequent conversations.

For the interviews with supervisors, I tried to unravel their ways of managing the group, so some questions such as 'when a novice enters this organisation, what will you suggest to them?', 'what is the main problem of managing public servants?' and so on were asked. I believed that supervisors' intentions might more or less affect employees' behaviour so as to influence interactions within the group, even though their interactions were more or less bound by the bureaucratic system and organisational routines.

For the interviews with subordinates, I tried to learn something about their attitudes to the bureaucratic system, the policy and the organisational climate. Through asking the questions, I also detected their attitude to their team leaders. The focuses of both the supervisor level and the subordinate one were not on what interactions they had already experienced, but on why and how they had involved themselves in the interactions. By way of conversations, I realised some common features that were shared by different groups. These features also became a foundation that enabled me to shape my argument.

3.2.5 Sampling

This research was intended to be exploratory and descriptive of the phenomenon of public servants' learning interactions. The primary units of analysis in this study were the individuals in the organisations that were selected for the study. More specifically, this study proposed to use two levels to compose cases: one is the supervisor level; the other is the subordinate level. The interaction between management level and subordinate level is an important factor that will affect individuals' learning strategies in the organisation. An individual's learning situation cannot be isolated from the

organisation in which the individual works and from the leadership to which the individual is answerable. Consequently, I divided the whole unit into the two levels to study.

42 interviewees who belonged to 15 departments that include personnel, financial and general affairs sections were recruited. 3 departments, D6, D9 and D14, were selected as cases to analyse in depth. Other interviews were used to construct the background and strengthen the arguments. The supervisor in each department was an essential component. If the supervisor was unavailable, senior employees became the first choice. For the pilot study, in addition to the supervisor, I invited another 4 at subordinate level in each department. Equal numbers of men and women were selected. For the main fieldwork, the samples could not be evenly arranged because of the limitation of using the door-to-door interview. The use of qualitative methods in this study justifies the relatively small sample size. In order to obtain an in-depth analysis of the findings, only a small sample size from each organisation can be obtained.

3.3 Procedures of Fieldwork

3.3.1 A Pilot Study

The pilot study was undertaken from the middle of March to the end of May in 2000. There were 4 purposes for conducting this study:

a. to test if the questions which I had designed were appropriate,
b. to establish contacts,
c. to better know the orientation and the implementation of the downsizing policy, and

d. to explore people's life in the work place especially within the context of the TPG.

The study not only helped me adjust interview questions and focuses but it also allowed me to configure an appropriate way of communicating with employees in the TPG. Furthermore, this study also enabled me to construct cases and uncover clues to revise my research direction.

3.3.1.1 Focus on Taipei Area

To test the validity and reliability of the questions, 10 interviewees had been recruited by February 2000. For the pilot, I chose the personnel departments of organisations which were branches of the TPG in Taipei. Taipei was initially chosen for its convenience as it used to be my area of residence. Since I had previous experience working in a personnel department, I decided to choose employees who were white-collar workers in order to avoid the risk of misunderstandings.

3.3.1.2 Recruiting Interviewees

Because I was in England at the time, these contacts were initially established by my wife. I asked my wife to contact employees in the TPG by phone in order to invite them to interviews. These contacts were established by February 2000.

Since I was not in Taiwan, it was difficult to obtain a name list of all the employees in the TPG, so using random sampling was impossible. Instead, I chose the snowball method to sample interviewees. In order to test the questions in varied backgrounds, I divided the samples which I would like to choose into 'Male' and 'Female' and with 4 classified periods of service years. All interviewees had been qualified by the national examinations. Table 3.3 illustrates the conditions I set.

Table 3.3: Sampling Conditions in the Pilot Study

Condition 1: position	Condition 2: years of service
Supervisor (male)	
Supervisor (Female)	
Qualified employee (male)	0-5 years
Qualified employee (male)	6-10 years
Qualified employee (male)	11-20 years
Qualified employee (male)	Above 20 years
Qualified employee (female)	0-5 years
Qualified employee (female)	6-10 years
Qualified employee (female)	11-20 years
Qualified employee (female)	Above 20 years

To establish the contacts, at first, I asked my wife to telephone one of the TPG's offices in Taipei. No matter who answered the phone, my wife asked him or her if he or she was a qualified public servant in the TPG. If the answer was yes and was with suitable conditions for this study, my wife would invite the respondent directly to being interviewed. If the respondent did not meet my criteria, my wife would ask him or her whether or not there was anyone who fitted the conditions in the department. She would ask if she could speak with the suitable person. This process took her about 3 weeks. In the end, there were about 10 people recruited.

3.3.1.3 Re-recruiting - The Ten Pilot Interviewees

After I went back to Taiwan on 15 March 2000, I rearranged the name list which my wife had produced. Since those people who were recruited by my wife were from varied organisations, it might be more difficult to explore an organisational culture through interviewing people from varied organisational backgrounds. Therefore, I decided to narrow the samples down and focused on 2 organisations instead.

After re-contacting these recruited people, I found that one of them was an alumnus of the University where I graduated from and was pleased to help me. He occupied the position of head at one of the departments in the TPG. Because of his enthusiastic help, I was allowed to conduct interviews in his department. After a short conversation with him, I proposed to him my plan and the conditions for interviewees. According to my requirements, he showed me a list of the employees in the department so that I could select potential interviewees. The list was an internal document. Employees' names in the list were sorted by position and years of service. Following the list, I found some people who fitted the conditions which I required. 2 of them (Ms. B and Ms. C) had been recruited by my wife in advance, so I just needed to find out another 2. Fortunately, 2 men with different service years were recruited. They were Mr. B and Mr. D. Their head, Mr. A, was also recruited.

In order to recruit another 5 people, I re-checked the name list that my wife had produced for me. I found two of the 11 people were in the same department. They were Mr. C and Mr. E. To make them feel comfortable with the interviews and to explore the relationships with supervisors and subordinates, it might be a good idea to invite their supervisor to join this research as well. I therefore contacted their supervisor to see if I could have an interview with her. She, Ms. A, was pleased to accept my invitation. After interviewing her, I asked her whether or not I could invite two of the employees in her department to complete my research. In order to take samples at random, I asked to view the name list. I told her that this was a formal process for random sampling which might make the research more objective.

Perhaps she thought that the contents of the interview were not sensitive questions, so she showed me a name list of the department and allowed me further interviews with

her subordinates. According to the name list, I found out Ms. D and Ms. E. The details of the interviewees recruited by the pilot research are given in Table 3.4

Table 3.4: Interviewees in the Pilot Research

Name	Age	Service years	Title of position	Org.	Date of interview
Mr. B	33	4	Subordinate	D1	29 Mar 2000
Mr. A	55	30	Supervisor	D1	15 Apr 2000
Mr. D	42	14	Subordinate	D1	15 Apr 2000
Ms. C	35	9	Subordinate	D1	16 Apr 2000
Ms. B	26	2	Subordinate	D1	21 Apr 2000
Mr. C	39	9	Subordinate	D2	27 Mar 2000
Mr. E	48	21	Subordinate	D2	13 Apr 2000
Ms. A	49	18	Supervisor	D2	25 Apr 2000
Ms. D	44	18	Subordinate	D2	5 May 2000
Ms. E	53	26	Subordinate	D2	5 May 2000

3.3.1.4 Establishing Other Contacts

Among the 10 people who were recruited by my wife, only 5 were actually interviewed. Of the other 5 people, 1 of them, a female supervisor, was too busy to accept my interviewing her at that moment, yet she was happy to be an interviewee for the next year. I also contacted the other 4 people by phone and went to their offices to have a chat with them individually. The purpose for my doing this was to establish further contacts for the main fieldwork the next year. I introduced my research to them and, in addition, discussed with them their life in the TPG, the impact of the downsizing policy, and gathered some suggestions about my topic.

3.3.2 The Main Fieldwork

There were 32 interviewees recruited for the main fieldwork. Because I had interviewed another 10 in the pilot research in the previous year, the samples that I have collected for this research have been 42 in total. During the period (from February 2001 to May 2001) of undertaking the fieldwork, I interviewed people in

each month, but the intensive months were February, March and April. Table 3.5 shows the schedule of the main fieldwork.

Table 3.5: The Schedule of the Main Fieldwork (February 2001- May 2001)

Date	Tasks
1 Feb –3 Mar	Interviewed the branches of the TPG in Taipei
5 Mar – 11 Mar	Interviewed the branches of the TPG in Chung-hsing New Village
12 Mar – 18 Mar	Went back to Taipei to collect some documentary and to find out dissertations concerning this topic
19 Mar – 1 Apr	Interviewed the branches of the TPG in Chung-hsing New Village
2 Apr – 8 Apr	Sweeping tomb
9 Apr – 30 Apr	Transcription, data analysis, interviewed the branch of the TPG in Tsow-Toon (Close to the Chung-hsing New Village)
1 May – 12 May	Transcription, data analysis, interviewed the Civil Service Development Institute
14 May –20 May	Holidays, back to England

3.3.2.1 Interviews in Taipei

In February, the focus of my interviews was on those people who worked in branches of the TPG in Taipei. Because of the connections that had been established in the pilot study, I started the main fieldwork from contacting the people I visited but hadn't interviewed yet. Since some of them had promised to be interviewed, I interviewed 5 people. 1 of them was a female supervisor, and the others were subordinates. I also visited those who had been interviewed in the pilot study, in order to establish more connections. Because this research was initially planned as a case study, sampling became an important issue to maintain its quality. In order to expand my circle of contacts, I recruited another 4 interviewees: 2 supervisors and 2 employees. The details of the interviewees are given in Table 3.6.

Table 3.6: Main Fieldwork - Interviewees in Taipei

Name	Age	Service years	Title of position	Org.	Date of interview
Ms. F	45	19	Supervisor	D3	8, Feb 2001
Ms. G	39	16	Subordinate	D3	23, Feb 2001
Mr. I	27	4	Subordinate	D4	6, Feb 2001

Ms. H	55	28	Subordinate	D4	15, Feb 2001
Mr. H	49	23	Supervisor	D4	9, Feb; 22, Feb 2001
Mr. G	46	19	Subordinate	D5	31, Jan; 7, Feb 2001
Ms. I	45	20	Supervisor	D5	14, Feb; 27, Feb 2001
Ms. J	30	4	Subordinate	D13	10, May 2001
Mr. Q	48	22	Subordinate	D13	10, May 2001

Four organisations of the TPG were visited, and all the interviewees were white-collar workers. The main task for the interviews was to understand how people's interactions, derived from different organisational cultures, were affected by the downsizing policy.

3.3.2.2 Interviews in Central Taiwan

Even though all of the interviewees agreed that the policy had more or less influenced them, they all believed that the influences which they had experienced were much smaller than those experienced in the Chung-hsing New Village. Chung-hsing New Village was the headquarters of the TPG before the downsizing policy. The TPG was located in Chung-hsing New Village with its various departments and institutions. Because of the downsizing policy, these buildings and departments now belong to the central government. Only one building had been spared for the TPG. Because of the change in the organisation, some people were kept in the TPG, while others were assigned to the central government. So employees were struggling between the new organisational culture and the old one. To make matters worse, the plan was repeatedly delayed, because the government had not completed its plans for re-deploying public servants. In this situation, although some employees had been assigned to the central government, they were still worried about their future.

Because I planned to visit the Chung-hsing New Village in March, I tried to establish new connections in the final week of February. My original idea was that I could recruit some interviewees in advance for the first week and other samples might be

available based on those being recruited. I tried to apply the successful experience in Taipei to the case of the Chung-hsing New Village. However, it didn't work. I spent one week contacting them by phone, and was rejected all the time. Most people on the phone told me '*why not come over and see if anyone is free, and then you probably can approach them?*', or else they would claim '*I have no time to speak to you and it is impossible for me to confirm whether or not I can be interviewed*', while other would retort, '*Could you please ask others for being interviewed?*' I got extremely negative answers that none of them wished to be interviewed.

3.3.2.3 Being Rejected

When I telephoned the TPG and explained to them about my research intention, I tried not to sound intrusive. I told them that I wanted to know about their life as public servants, their learning and growth during the period of their career and their career planning in the future. A female manager who answered the telephone expressed a very violent emotion and said, '*Why do you always try to interview us? We have lost everything now. How can we have any plans for the future? Why do you always try to reveal this painful memory again and again? We are so busy now, and there is nothing to discuss*'.

I was frustrated by repeated rejections. However, I still tried to calm myself and, surprisingly, I found something interesting coming out from her answer. At first it seemed that there were some other researchers already engaging in this topic, otherwise the woman would not be bothered again and again. I might be able to find out some important references in the libraries. Secondly, the downsizing policy must have greatly affected their life, a fact which made them feel that they have lost everything. What struck me about her answer was her claim that she was unable to

plan for the future. It seemed to me that not only could they not get rid of the pain but also that the pain was still increasing. However, it was also possible that they were too busy to plan for their future. In order to understand the situation more, I telephoned one of my interviewees in Taipei. She revealed that most employees in the area felt upset partly because the policy was still under negotiation and partly because an earthquake had just occurred and the area was really damaged. She also tried to help me by inviting two of her friends to my interview. Unfortunately, both of them rejected the idea.

3.3.2.4 Learning from Experiences

This frustrated feeling reminded me of the experience of being a salesman 15 years earlier. In order to sell books and classical music tapes, I went to visit customers door to door. Since I told myself that it was normal to be rejected, I continued the task even though rejections went on and on. Because of the experience, a sudden idea came into my mind that I would give myself just 2 weeks to see whether or not I could recruit any interviewee by using the door-to-door method. If the people in Chung-hsing New Village did not want to be interviewed, I would try to interview people in other counties who were also strongly affected by the policy. This thinking made me feel better able to face this difficulty. Actually there were some exciting feelings in my mind, because I was going to experience again the life of being a salesman and to gamble if my ability was good enough to cope with this problem.

3.3.2.5 Door to Door Interviews in Central Taiwan

Although I chose the door to door method to undertake the fieldwork, I didn't give up contacting them by telephone. On the first Monday I arrived at Chung-hsing New Village, I went to the library to find out all the information, which included the

Divisions of the TPG in the area, their locations and their phone numbers. I made phone calls one after another. The result was in the end similar to what I had experienced in Taipei. Most of them rejected me, so I decided to visit them without making an appointment.

The headquarters of the TPG was the first organisation that I visited. When I just tried to enter the main gate, I was stopped by a security guard. In order to get into the building, I telephoned one of the offices in the building and explained to the woman about my intention. She rejected me soon after hearing my words. However, she agreed to scan my interview schedule when she knew that I had come all the way from Taipei and I was at the main gate. The woman did not agree to be interviewed in the end, but she recommended me to the head of the organisation. I then started my work in the TPG.

I found that the door to door method was feasible in the area. This experience was totally different from what I had found in Taipei. I used this method to approach my samples, and I could more or less find people to interview. However, adopting this method made the sampling not random at all. The result of this sort of research process only enabled the researcher to reveal certain facets of reality but made it less possible to generalize the findings. Table 3.7 shows the details of interviewees in the central Taiwan.

Table 3.7: Main Fieldwork – Interviewees in the Central Taiwan

Name	Age	Service years	Title of position	Org.	Date of interview	Remark
Mr. X	40	16	Subordinate	D6	8, Mar 2001	Case 2
Ms. Q	28	6	Subordinate	D6	9, Mar 2001	Case 2
Mr. W	43	20	Supervisor	D6	21, Mar 2001	Case 2
Ms. O	34	9	Subordinate	D6	21, Mar 2001	Case 2
Ms. P	44	19	Subordinate	D6	22, Mar 2001	Case 2
Mr. N	41	18	Subordinate	D6	20, Mar 2001	Case 2

Mr. U	49	25	Supervisor	D8	7, Mar 2001	
Mr. L	37	15	Subordinate	D9	8, Mar 2001	Case 1
Mr. M	36	12	Subordinate	D9	8, Mar; 9, Mar 2001	Case 1
Ms. R	32	9	Subordinate	D9	9, Mar 2001	Case 1
Mr. J	55	30	Supervisor	D9	27, Mar 2001	Case 1
Mr. K	33	8	Subordinate	D9	27, Mar; 30, Mar 2001	Case 1
Mr. R	42	18	Subordinate	D9.	30, Mar 2001	Case 1
Mr. S	48	22	Supervisor	D10	19, Mar 2001	
Mr. O	43	17	Subordinate	D11	6, Mar 2001	
Mr. P	33	10	Subordinate	D7	9, Mar; 30, Mar 2001	
Ms. N	31	6	Subordinate	D12	20, Apr 2001	
Mr. T	54	28	Supervisor	D14	6, Mar 2001	Case 3
Ms. K	33	8	Subordinate	D14	18, Apr 2001	Case 3
Ms. L	40	15	Subordinate	D14	18, Apr 2001	Case 3
Ms. M	43	18	Subordinate	D14	19, Apr 2001	Case 3
Mr. F	28	5	Subordinate	D14	9, Mar 2001	Case 3
Mr. V	48	26	Supervisor	D15	9, Mar 2001	

3.3.3 Coding and Analysing

The process of data analysis is an on-going interaction by which the raw data, the relevant literature (or the analysis framework) and researchers' established knowledge enrich each other. Based on their established knowledge, researchers interpret their findings and acquire understandings from the process of interpretation. This is the starting point for coding and analysing. For instance, while conducting the fieldwork, I also focused on public servants' learning motivation and tried to explore why and how their learning motivations were triggered by way of interacting with others. Understanding their stories of interacting with colleagues, I realized that gaining group acceptance was somehow a motivation for learning and, additionally, establishing interpersonal networks was a usual practice when an individual participated in a group's activities (I will explain this notion later.) A process such as the above, which includes classifying, comparing, explaining, and making sense of data, provides the researcher with a continuous reflection and enables him or her to construct alternate understandings of reality.

By classifying raw data into categories, researchers try to explain links between categories in a logical way in order to contribute to established knowledge (Phelan and Reynolds 1996:120). Through reviewing the literature, not only can researchers re-examine whether or not current theories are able to explain the findings, but they can also make comparisons between their findings and those of other researchers in order to highlight their own contributions. It is not the raw data which directs the analysis, yet neither is it the researcher's intentions or certain theories which guide the data analysis. Data analysis and theory building are processes which involve dialogue, and which enable the researcher, the data and theories to merge into each other. In the present research, data analysis was carried out during and after the process of fieldwork. In parallel with this, I kept reviewing relevant literature. Data was examined with regard not only to its contents but also with reference to its context in order to classify the informants' descriptions of thought patterns, feelings and actions in relation to the key themes of the research.

3.3.3.1 Reviewing, Understanding, Comparing and Categorizing

The interviews for this research were audio-taped and transcribed verbatim. Although I transcribed the conversations with interviewees sentence by sentence, I did not analyse each transcription in its entirety. I chose relevant contexts and contents to analyse.

In order to ensure the quality of translation, I had my English tutor to help me to translate interviewees' words into English. I translated what I judged to be the important parts of conversations recorded in Chinese into English. When each conversation was translated, I asked my English teacher to explain them to me to see whether or not his understanding about the words was what the interviewee wanted to present. Some terms such as "hot potato", which has a similar meaning in Chinese

"烫手山芋", can be discovered in transcriptions. This shows that even different languages have common contexts. The translation went along with the process of data analysis. Through analysing the data, I realized that particular conversations should be classified to particular categories. Dealing with data in both Chinese and English assisted in giving the raw data appropriate labels.

In order to make the process of analysis more effective and efficient, I reviewed the transcriptions and frequently listened to the audio-taped conversations. Studying transcriptions repetitively enabled me to gain a deeper understanding of the contents of each conversation and also to explore the relations between the relevant words and other stories of the interviewee and of other people. Listening again to the conversations gave me a chance to gain more insight into the context of the interaction and what my interviewees were feeling. In other words, repeated exploration of the contexts of conversations facilitated my reading between the lines and my understanding of the data, and I felt better equipped to explain its diversity. At the same time, frequently reviewing transcription enabled me to compare an individual's experiences to others' and thus to deconstruct the data and detect similarities within it.

In order to make the comparisons, it became important to highlight patterns which would form the basis of comparative bases. I tried to summarize relevant data by using many labels, so that relevant data and their comparative bases should emerge. At the same time, I kept reviewing the literature in order to understand other researchers' work and to find out useful strategies to organize the labels. In this process, I produced many categories which enabled me to integrate the varied labels into my argument, so that my judgment affected how I categorized the data and how the coded data was interpreted (Phelan and Reynolds 1996:120). In other words, the process of analysis

implied ongoing interactions between raw data, my established knowledge and the literature about communities of practice. Table 3.8 is an example which shows the way I analysed Mr. X's words. In the interview, Mr. X was asked whether or not he felt busier than usual during the period of downsizing. Answering the question, he seemed to reveal his attitude to work and so mentioned a general working situation in the department. According to Mr. X, people's interactions in the group seemed to be directed by the individual's powerful desire to be accepted by the group, which may echo some concepts in the idea of communities of practice.

Table 3.8: A Sample of Data Analysis - Mr. X

Raw data	**Reflecting on my understanding**	**Categories**
Mr. X: *'We do not ask for overtime pay, even if it is necessary to work overtime'.*	This seems similar to the situation in the private sector, but this is not a general situation in the TPG. How does it come about that individuals in the group are so concerned with self-discipline? And can this motivation also be found in communities of practice?	Self-discipline
Mr. X: *'Other people will laugh at you if you do so, because it is your duty to complete the tasks'.*	In Mr. X.'s idea, it is the feeling of avoiding other people's mockery that motivates individuals in the group to give up asking for overtime pay. In these circumstances, Mr. X points out two elements: being accepted by the group and one's self-expectation.	Gaining group acceptance, self-expectation
Mr. X: *'You will feel ashamed if you need to work overtime, since you cannot finish your duty on time'.*	Mr. X highlighted the two elements. If the individual could not accomplish his or her responsibility, the individual should feel ashamed. It seems to me that the group values the taking of responsibilities. People cannot be accepted by the group if they cannot finish their duties.	Gaining group acceptance, self-expectation, responsibility
Mr. X: *'So, wouldn't you feel embarrassed if you asked for overtime pay?'*	The value of taking responsibilities and the importance of being accepted by the group are highlighted again.	Gaining group acceptance, self-expectation, responsibility

To understand people's insights, I tried to read between the lines and to reflect on my established understanding about their lives. These reflections partly derive from rethinking interviewees' words, and partly from my research diary which noted some

sudden ideas during or after each interview (Gillham 2000:24). Merging my comments with the interviewee's original words, I tried to use a concise word to label the key idea of the new understanding. In this situation, my comments and the raw data provide these categories with a context which helps me trace the process of knowing. Interviewees' words were summarized so that my new understandings derived from data were conceptualised and categorized. The merging categories were assessed and compared and then developed. According to Mahajan (1997:54), '*We communicate with and understand each other because our performances and utterances invoke this world of shared practices and meanings*'. In the above process, I, the researcher, was not isolated from the data, but became involved in it. Although interviewee's opinions became the main contribution to the research propositions at all stages of the analysis, my interpretations of their opinions also played a major role in mediating varied ideas from the interviewees' different experiences, from different informants and from the literature.

Because the interview method which I adopted was the semi-structured interview, most questions were open in order to explore interviewees' insights in depth. The focus of the data became blurred, even though interviewees' stories were all about their participating in organisational activities. For instance, Mr. X's words were given some labels such as gaining group acceptance, taking responsibility, self-expectation and self-discipline. Similar labels could also be found in the conversation with Mr. W, the head of the group. Table 3.9 shows the relevant analysis of Mr. W's words.

Table 3.9: A Sample of Data Analysis - Mr. W

Raw data	**Reflecting on my understanding**	**Categories**
Mr. W: '*I found there is always a sense of "self-expectation" in the*	Mr. W. thought that it was members' "self-expectation" which disciplines individuals to complete their tasks effectively and efficiently. There seemed to be a mysterious element, which	Self-expectation, self-discipline, mental model,

organisation, even though the origins of this tradition are obscure'.	kept motivating employees' self-expectation. So, the "self-expectation" should not be the tradition itself, but the result of the tradition. Because the term 'self-expectation' implies the expectation being triggered by one's mental status, how can an individual's mental model become a tradition to discipline other's performances? (Learning organisation theories seem to suggest some ideas which enable varied mental models in the organisation to be unified) The real meaning which Mr. W wanted to express should be that an obscure element motivated members' self-expectation so that the results of the group were always satisfactory.	motivation
Mr. W: *' "self-expectation" impels employees to strive upward'*	A function of the "self-expectation" is to motivate the individual, and the result of the motivating can lead to a positive result. Mr. W seemed to make a general statement that the result is good for both the individual him or herself and the organisation. It seems to imply that a subtle element bridges individuals' expectation with the common vision of the organisation. Because Mr. W and Mr. X had similar attitudes to work, I am not sure whether or not their value systems have also been unified by this element.	Self-expectation Common vision Positive motivation Value system
Mr. W: *'Through invisible networks or relationships in the organisation, this concept is spread all over the department so that all the members share the same attitude'*	So, Mr. W agreed with my reasoning that the element also affects members' attitudes to work. He also pointed out that the interpersonal network is a tool by which some tacit information is delivered. So, in his opinion, people in the group have shared attitudes, and the attitudes refer to members' self-expectation. How does it come about that different individuals' respective expectations result in shared attitudes? What is the role of the interpersonal network when people interact with each other? What does this imply in terms of learning?	Interpersonal networks, knowledge sharing, shared attitude

In Table 3.9, Mr. W was asked how he helped his colleagues, especially new comers, learn the necessary skills. Because he attributed the good results of the organisation to every individual's self-government, I wondered how people in the group could be so self-disciplined. His answer, given above, seemed to reflect Mr. X's description. Although different questions were asked, both answers referred to a common clue that there was a synergising power in the group that made members' efforts cohere. When

analysing Mr. X's words, I used some labels such as "Self-expectation", "Self-discipline", "Mental model", "Motivation", "Common vision", "Value system", "Interpersonal networks", "Knowledge sharing", and "Shared attitude". These labels were used to compare and associate with other labels extracted from the individual's other stories or other interviewees' experiences. For example, the cases of Mr. X and Mr. W both elicited the labels "Self-expectation" and "Self-discipline", which are overlapping categories. The coincident labels become a bridge, which relates the contents of different people's stories.

3.3.3.2 Constructing Basic Story Lines

The next concern in conducting data analysis was about how I could make use of the categories. In interviews, interviewees revealed themselves so that I understood their ways of thinking, the contents and contexts of their opinion and their feelings in terms of certain policies, personal issues and interactions. This also helped me recognize the significant part of their viewpoints so that their initial idea could be represented in this research. Comparing labels which echoed the similarities of viewpoints derived from raw data and the literature, the highlighted significances within each context came to be the keys which enabled me to explain interviewees' experiences and justify my arguments. This process is similar to the process of engaging in a dialogue, where participants confirm or persuade each other depending on their intentions to the dialogue (Gudykunst 1991:143-144). It also reflected on the story line which I constructed and supported my interpretation of the findings.

3.3.3.3 From the Empirical Findings

The story that I created was based on references to the transcriptions where interviewees presented their ideas that relate to some common categories derived from

continuing comparisons. I discussed these categories by quoting from their original words, comparing the experiences to others and looking at how their opinions made sense. In these circumstances, some tacit items of knowledge were included. The tacit parts which were not expressed by words in one situation might be detected in some other situations. For example, in his interview, Mr. W did not greatly highlight the concept of being accepted by groups, and I did not deliberately lead the conversation towards that concept. However, Mr. W did reveal, in other conversations, that he was motivated by gaining group acceptance. (This will be introduced in Chapter 6.) Dealing with these tacit types of information, I came to understand more about why the individual adopted a particular way of acting and how this behaviour proved effective for him / her. In the meantime, I also kept reviewing the literature in order to build a bridge between my empirical findings and the work of other researchers in the field (Bell 1999:90-91). I was able to compare some of the understandings I had gained from the analysis with significant ideas which derived from my critical reading of the literature. At this stage, some basic story lines were constructed and awaited further compilation.

For instance, according to the analysis for Mr. W's and Mr. X's words, I supposed that people in the group tried to behave the same as other colleagues in the face of common events such as asking for overtime pay, in order to be accepted by the group. When taking responsibility becomes one of the criteria for being recognized, people may try to make themselves responsible and self-disciplined and to live up to their self-expectations. Being recognized as this type of person can not only make them accepted in the organisation, but can also provide them with such privileges as a good reputation to help them develop within the group. Because the group recognizes certain types of

behaviour and it also has a powerful disseminating tool (that is, interpersonal networks to spread ideas) different value systems are gradually unified

This kind of reasoning proved a useful beginning, but the facts called for a deeper analysis. Additionally, the varied labels seemed to imply varied development of focuses. How could I make relevant labels cohere? Which significant incidents did I need to focus on? What does the analysis mean to the concept of CoPs? In order to make the argument more deliberative and to move focuses from chaos to order, I went back to the process of studying the literature and tried to find out some framework, which might have been mentioned in the concept of CoPs or other fields of knowledge.

3.3.3.4 Relating to Theories

As I progressed with the analysis, I adopted many ideas from the concept of CoPs. This concept also helped me to form comparative bases which, in turn, enabled me reflect on the relations between knowledge sharing and creating. Building on these bases, I would frequently revisit the text at various stages of the analysis in order to discover similarities among the transcriptions. Because the concept of CoPs was also the key theory to which I wanted to contribute, reviewing the literature was a continuing work being conducted along the whole process of the research. My understanding of the concept of CoPs kept developing as I reviewed more relevant sources and justified my research findings.

A community of practice is generally understood to be one in which the participants can use the resources in the community and share their experiences openly and without constraint (Gore and Gore 1999:S554-S560). In this light, the community is analogous to a college, in which tutors are drawn from varied professional backgrounds and are

ready to help. Because the community collects different ideas referring to common issues, participants may be able to view issues from varied viewpoints (Easterby-Smith, Snell and Gherardi 1998:259-272). Building on the contributions of others, members produce new ideas, and this process leads conversations into deeper discussions and more penetrating insights (Brown and Duguid 1998:90-111). Because the development of discussions is not intentionally directed, knowledge creation in the community has the energy and unpredictability of life itself (Graham, Osgood and Karren 1998:34-38).

Reciprocity is an important key to which Lave and Wenger refer as "legitimate peripheral participation" (Lave and Wenger 1991:56). New comers learn basic skills by taking up a position on the periphery and gradually being allowed to move slowly from the periphery into the core of the community (Brown and Duguid 1998:90-111; Graham, Osgood and Karren 1998:34-38). Looking at Mr. W's and Mr X's stories, it became clear that in order to be qualified as members of the group, people try to play suitable roles so that they will understand what the group is and what is required of them in that group (Charon 1998:63). In order to be recognized as a person who has keen sense of responsibility, the newcomer tries to follow the shared practice.

3.3.3.5 A Story Line

In Mr. W's and Mr. X's cases, the influences of the group on individuals determine not only what they do but also how they perform tasks. In these circumstances, the individuals' attitudes to work, such as having a sense of responsibility or self-discipline, were highlighted. In other words, some organisational value systems have been unconsciously imposed on individuals' learning. Individuals in the situation not only learn explicit knowledge but also become aware of tacit information such as value

systems and relations in the group (David 1997:34-42;). These explicit and tacit types of information are then merged into organisational practices by way of people's interactions and affect people at every conceivable level when they communicate with each other or deal with tasks (Gore and Gore 1999:S554-560). One's value system and attitudes to work in the organisation are the results of the ongoing interactions between the individual, the culture and the system. Because the individual has particular judgement and attitude to his or her tasks, the tasks which are assigned to them have particular influences on knowledge sharing and learning. Mr. W's and Mr. X's opinions seem to identify three factors (value system, tasks and one's attitude to work) that may influence the results of one's learning within the context such as the TPG. The three factors will be introduced in detail in chapter 8.

By comparing my own provisional conclusions to other people's words referring to a common category, I was able to enrich the story line. After reviewing the ideas from different people concerning being accepted by the group (For example, Mr. N's and Mr. M's opinions which will be introduced in chapter 7), the learning effect which derives from the feeling of identification seems to based on the concept of making comparisons. In order to gain the group's acceptance, people try to understand the differences between themselves and others. Once differences have been identified and recognised, people try to close the gap between themselves and others in order to gain acceptance from the group. The making of comparisons also helps individuals to become more aware of their own established knowledge, so that they become introspective.

In order to gain group acceptance, people try to acquire necessary information. This information is not necessarily something professional but some particular know-how

which can help the individual be accepted in the organisation. In this situation, learning becomes a tool which enables the individual to close the gap between the private self and the public self. On the other hand, the concept of identification with the group also helps the development of interpersonal networks. In order to be accepted by the group, people who were not familiar with each other try to explore each other's personalities and ideas. This interaction facilitates the ongoing development of the community and its discussions.

Additionally, people also try to use their interpersonal networks to work out solutions in order to solve problems in the work place. Because the individual has been recognized as one of the members, other colleagues are pleased to help or give advice on what to do and how to deal with tasks. In this situation, interpersonal networks seem to facilitate experience-sharing and they are established by way of one's acceptance into the group.

3.3.3.6 Reflecting on and Enriching The Story Line

Associating the above thoughts with the concept of CoPs, some ideas which are overlooked by the theory emerged. In the concept, a community of practice highlights one's feeling of identification within the environment. In the community, people are encouraged to discuss a common topic, and in this process different professions of people are fused by working on a shared task (Rogers 2000:384-392). In order to continue and develop the effect of fusion, some shared practices – which include a common goal, a common language, regular ways of dealing with things and standard solutions for sorting out problems – are developed (Graham, Osgood and Karren 1998:34-38). However, although these shared practices constitute a solid basis for

sharing and understanding information, they also distinguish insiders from outsiders and so some new ideas may be blocked from entering the community.

In some cases such as Mr. W's and Mr. X's, both ideas of identification and interpersonal networks are highlighted. They are also mentioned in the concept of CoPs (Araujo 1998:317-336). However, the question remains about the relations between these two ideas. What are the relations between the four elements (being accepted by groups, making comparisons, interpersonal networks and engaging in exchanges) and the three factors (value system, official business and one's attitude to work)? It seems that something is missing which would enable me to bridge the elements and factors. What is the missing link? Looking into theories and comparing with other interviewees' ideas enabled me to construct my understandings of these relations and so to enrich the story line. These thoughts will be revealed in chapter 7 and chapter 8.

3.3.3.7 "Language in Use" versus "Analytical Concepts"

The findings in this research are mainly from the data. Some terms, such as "sluggish", "slothful and inactive", "indolent" and "lazy", imply value judgements and are directly applied in the text. Because they imply value judgements, I put short explanations when these terms are used in the text. In order to distinguish between language in use and analytical concepts, I identify the origin of the term I use. I also explain the reason why I use particular terms in some cases.

These terms are about interviewees' understanding about general Taiwanese opinions on the public service. In other words, these terms do not reflect interviewees' personal feelings about the TPG, but indicates their understandings about the public's general

opinions. These descriptions echo my personal experiences of interacting with employees in the public sector. I believe that each of the terms, such as above, reflects part of reality.

All the labels - such as the four basic elements and the three adjustment factors - emerged from the process of data analysis, and they are analytical concepts. Only one of these labels, official business, is adopted directly from interviewees' words. I deliberately use this term as a label, because it implies the context of the TPG. Because of the particular context, this term, the official business, enables me to reflect on my understanding about the CoPs. This will be discussed in Chapter 8.

3.4 Reflection

3.4.1 Shifting Cases

The research method was adopted contingently. Research can be defined as a process for exploring reality. Since reality cannot be isolated from its context, hundreds of situations may happen to affect the exploring process during the research journey. A researcher who would like to approach reality may adjust research methods to the changes in the situation. For example, I planned the pilot research in England and implemented it in Taiwan in a different way, because I found a better way to undertake the fieldwork when I became seriously involved in the process. Therefore, after evaluating the situation, the researcher may change the original plan in order to exploit better opportunities which arise. While the researcher is involved in reality, he or she may find out more about the object which he or she is going to study so that the research plan may also be changed. For instance, originally I planned to collect samples only in the Taipei area, because focusing on one city could diminish, in my

opinion, the influences from culture difference. Additionally, Taipei was my home city, so I was more familiar with its culture than that of other cities.

However, when I was told by interviewees that the public servants' life in the Chung-hsing New Village was, due to the downsizing policy, very different from those in Taipei, I decided to alter my plan and went to visit the Chung-hsing New Village. In a way, the TPG's employees in the Chung-hsing area might be those who were affected most by the policy, compared to those in other cities. Since they were deeply affected and they constituted a considerable portion of the population, I could not ignore this influence if I wanted to continue this research. In this situation, I moved my focus from Taipei to central Taiwan. Even though cases in Taipei were not necessarily able to reflect the situations in central Taiwan, I could still use the data collected in Taipei to build up a picture of the TPG, its culture and ethos. Different lives which were affected by a common impact also provided clues to explore people's learning interactions. However, I did not draw comparisons between employees' lives in Taipei and those in central Taiwan, because comparative study was not the main purpose of this research.

The above indicates the possibility of shifting research focuses. Because the researcher gradually understands his or her research target and its limitations, he or she may adjust methods or processes in order to achieve the research purpose.

3.4.2 Narrowing Down Research Focuses

Because I have used the case study method several times (four times), I have learnt the risks of shifting topics or cases. However, in order to ensure that the theories, the data and my assumptions were well matched, I reviewed literatures widely in the first

instance, especially on the topics of the learning organisation, organisational learning and knowledge management. What I initially wanted to do was to use the concept of CoPs to bridge these ideas. Because the core of the concept of CoPs is based in people's interactions and the original issue was about learning motivation, interview questions focused on why and how they joined the group, interacted with others and coped with their difficulties derived from the change of the environment. Since the original intention was ambitious, the data that I collected was not only about people's interactions but also related to the group value, organisational routines and supervisor's leadership.

Even though the data was rich, it was still not sufficient to provide a foundation for theories on the relations between organisational learning, the learning organisation and knowledge management. The situation was partly due to the fact that my knowledge of the three topics was fragmentary and did not allow me to develop the relevant theories, and also partly due to time limitations which restricted my fieldwork and the time I had to read more material. Nevertheless, the collected data, which was based on the design using the concept of CoPs, seemed adequate to explain the relations between the individual and the interactions that he or she was engaging in. The topic of this study was then narrowed down to discuss the CoPs.

Although the focus of this study has been narrowed down, the situation did not affect the tasks of fieldwork but influenced the theoretical work that enabled me to interpret the findings. In Yin's opinion, this situation can cause a fatal flaw for doing a case study. He suggests that

'An investigator must be careful not to shift, unknowingly, the theoretical concerns or objectives. If these, rather than the cases themselves, are changed, the investigator can correctly be accused of exercising a bias in conducting the research and interpreting the findings. The point is that the flexibility of case study designs is in selecting cases different from those initially identified but not in changing the purpose or objectives of the study to suit the case(s) that were found.' (Yin, 1994:52)

I do not agree with this statement, because he seems to view the case study method as a scientific experiment that is used to verify whether or not the empirical data can echo the initial identified hypothesis. However, because the social environment is changeable and people's interactions within the shifting environment imply a strong connection between those are researched and the context in which they are, it is very possible that current theories or hypotheses are not functional to interpret reality. Based on questions interrogating the 'how' and 'why', the researcher certainly can use a different theory or hypothesis to interpret data in order to challenge the initial hypothesis. 'How' and 'Why' questions refer to the process of knowledge creation. How can a new understanding, based on the questions, be created without any different ideas? However, the judgment still relies on the following situations:

The researcher's view of reality

If the researcher views him- or herself as an integral part of reality to be explored, the researcher and the research design are inevitably involved in and affected by the research process. Based on this point of view, case study is only a strategy to present the researcher's findings. The validation of the research relies on how in depth the researcher reflects on his or her research plan and the process.

The researcher's attitude to study and the meaningful feeling in the researcher's mind.

According to Harvey, MacDonald and Hill (2000:14), the researcher's ways of thinking about the world, regarding appropriate evidence, and the ways of defining what constitutes knowledge will affect the choice of research method and data analysis. If the researcher believes that revealing reality is more important than constructing a perfect case study, he or she may try to seek appropriate logic to interpret the findings in order to criticize his or her original base.

The process of undertaking fieldwork is also a process of learning.

This statement implies that researchers reflect on the whole design of the research. Researchers are not sure what reality is, even though they may have borne some hypotheses in their mind. The hypotheses and the research design are not fixed entities rather, they must be considered as stepping-stones through which researchers may be able to tackle reality. If researchers immerse themselves in the data, it is very possible that they find that reality is far beyond their imagination. In order to explore reality in depth, the researcher may prefer using multi-methods to probe the facts and adopting diverse logics to explain the findings. Researchers may persist in the original research design or analysis, yet the result may not be able to persuade the researchers themselves, but others.

Research is the process that provides chances for interacting between theoretical concerns and reality.

In the process, the researcher chooses appropriate cases to demonstrate his or her assumptions, and at the same time the researcher also reflects on his or her theoretical concerns by way of making comparisons between logic and reality. It is less possible

to find certain cases to fit the theoretical concerns, unless the researcher adopts certain angles to do the research. It is allowed and necessary that certain variables are controlled, yet too many controlled variables may lead the research to have less profundity even though it may be satisfactory in terms of methodology.

A PhD research such as this study focuses, in my opinion, not only on the process of doing research, but also on revealing the researcher's view of the events which he is dealing with. Since I view creating knowledge as an important key for doing this PhD, some risks such as being accused of exercising a bias in interpreting the findings may be inevitable.

3.4.3 About Interview Method

Gadamer has argued that a dialogue is the process of understanding. He describes conversation as a situation in which:

> '... *each opens himself to the other person, truly accepts his point of view as worthy of consideration and gets inside the other to such an extent that he understands not a particular individual, but what he says. The thing that has to be grasped is the objective rightness or otherwise of his opinion, so that they can agree with each other on a subject.*' (Gadamer 1979: 347)

As such, a dialogue seems inherently risky and involves challenging our own viewpoints and assumptions so that both the interviewee and the interviewer could reflect on their original understanding. This idea also reflects my experiences of undertaking the fieldwork. For instance, when I conducted my pilot study in 2000, I asked some interviewees whether or not they thought a public servant had some advantages in terms of learning within this sort of environment. Some of them could answer the question immediately, yet some of them couldn't understand what the

question was because they thought it was too vague. They asked me, '*What sort of learning do you mean?*'. It seemed to me that they could not completely understand my question.

Some replied discussing ideas about obtaining further education in school or about attending training programs. However, this was not the sort of learning to which I was referring, because I could easily understand the training system by comparing some documentary data. Even though they did not start the discussion from the topic which I wanted to understand, I still sometimes chose the ambiguous way to raise questions because ambiguous questions might reveal their real view of 'learning'. However, what I wanted to know about was the informal learning that happened within their interactions with colleagues. In order to explore such informal situations, I made the direction more clear and asked them in another way: '*Do you think that you have learnt something through interactions with your colleagues? What was that? Could you please give an example?*'. The result of this way of putting the question was better than the original one, because many interviewees could reply with concrete answers. Some of them also told me about their experiences or other colleagues' stories.

In this situation, interviewees could gradually understand what the researcher wanted to know by way of the information that was gained through the conversation process. Information that was given by the researcher provided interviewees with a chance for exploring the researchers' intentions and also his or her views of the world. The conversation was then gradually directed to the research topic. Nevertheless, these questions seemed still difficult for some interviewees. They suggested that because the definitions of learning were varied and abstract they did not know how to answer the question appropriately. I found that they sometimes pondered long and deeply over the

questions. So, I kept amending the question to '*Some people believe that people can learn something through interactions with others. Do you think you have ever gained anything from interactions with colleagues? If you do, what was that? Could you please give me an example?*' Interviewees seemed able to answer this question more easily than previous questions.

Although this might not be the best way to explore learning interactions in organisations, I still collected important ideas by way of this kind of conversation. However, it was risky to issue questions in this way, because some interviewees seemed, according to my observation, still under pressure to answer questions. Some of them told me at the end of the interview that the process of recalling and judging if they had gained something from interactions had been quite a big effort for them. However, not everybody can reflect on their behaviour or the whole story after events.

Even though I agreed that their pondering over my questions was probably a sort of reflection that might also have enabled them to expand their knowledge, this situation did not always happen. Gadamer (1979:143) believes that the interviewer and the interviewee bringing their own 'horizon of understanding' to encounters. In my experience, the 'fusion of horizons' happened sometimes when I interviewed the public servants in Taipei. Interviewees in Taipei seemed able to accept being interviewed so that I could give them the questions in advance and have a discussion with them on another day. Since they had had time to reflect on their stories and think about my questions, we could then exchange our insights during the meeting. During the process of 'fusion of horizons', both the interviewee and the interviewer exchange their knowledge so that the researcher can learn more about reality (Gadamer 1979:273).

Since I could not make an appointment with employees by phone in central Taiwan, asking them to preview my questions was not possible. I tried several times to give them the questionnaire in advance and ask them to answer questions in our next meeting, either they returned the questionnaire to me or they cancelled the meeting in the end. I finally accessed them by the method of door to door.

In the door to door interviews, I could not give them too much time to think about my questions and their answers. I supposed that people might tend to say more about their successful experiences, which might trigger our conversation. In addition, questions such as individual experiences or others' stories might, according to my experience, make them feel free to speak if the topic was not sensitive. So, I started the interview with questions like: '*Why did you choose to be a public servant as your career?*' or '*We all know that public servant examination is really competitive. How did you prepare for the examination*?'

This question normally let them tell me their stories so that I could grasp more about the interviewee's belief or habit. According to Davies (1991:42-53), '*stories are the means by which events are interpreted, made tellable, or even liveable. All stories are understood as fictions, such fictions providing the substance of lived reality*'. Similarly, listening to their stories was not merely for the purpose of knowing the contents of the stories, but also for recognizing the context as experienced by the storytellers. I could then have a rough concept of their definitions of learning, their learning styles and the possibilities and conditions for triggering their learning.

The conversation would then be led toward asking them to make a comparison between life in the private sector and in the public one, a comparison between the original idea of being a public servant and their present situation, or a comparison between life in school and life in the TPG. I could tell that they felt easy and curious in these conversations. They felt easy probably because the answer could come out of their experiences directly, and they felt curious because they did not think that such an unimportant issue (for them) could be studied. Their histories or daily life stories enabled me not only to detect their learning habits, but also to grasp some contexts of interactions. Based on the contexts, I understood their definitions of learning and also comprehended why they interacted with people in those ways. These realizations also made me reflect on my own definition of learning and my ways of interpreting their interactions.

3.4.4 Door to Door Interview – Learning from Experience

The door to door method to access interviewees plays a major role in this research, as it affects the ways and the effects of constructing networks for communication. The door to door method relies heavily on the trust within interpersonal interactions. Not only must the trusting atmosphere be established from the start, but also the relationship has to be maintained or improved during the process of interaction. The door to door method may not be, in this research, the best choice, but under certain conditions it proved to be the only way of accessing information. In central Taiwan, because the people didn't trust me before they had met me, I couldn't make an appointment with them to have interviews.

I have already mentioned in previous paragraphs that the door to door method was a trial strategy, which derived from my past experience of being a salesman. Apart from

this method, I had also formulated other strategies for fear that the results of the door to door method would not be satisfactory. Before I entered the public service career, I had a two-year-experience of being a salesman (in computer service). During the latter period, I learnt that people's interactions are not necessarily based only on their familiarity or interest. A lot of interactions are triggered by people's unwilling or unconscious conversations. For example, when I showed my software to a potential customer and invited him to evaluate it, I could see the change on his face and could thus understand the reason why he rejected my product. It is normal that a customer rejects the products which he or she does not need. From a customer's standpoint, to buy or not to buy may be the main decision which he or she wants to make. From a salesperson's standpoint, there is always something behind the deal, and the 'something' is also a key which enables him or her to keep visiting customers and searching for business possibilities. In my experience, whether or not customers evaluated my product as good was not the most important thing, rather than whether or not they determined to buy it. The most important thing, it seemed to me, was to explore customers' needs and to understand customers themselves. Based on my understandings about them and their needs, I could keep improving my products and modifying my views of the market.

On the other hand, to buy or not to buy was not a simple decision which relied on some fixed conditions such as the best price or the best quality. This was a relative decision which was contingent on the buyer's view of the product and his or her own situation. For example, although the potential customer did not mark my product best, he bought my product in the end. He complained to me of my product while I demonstrated it. I asked him to have a free trial. I told him that I did not mind giving him my product in free charge as long as he could point out flaws of my product after

using it. He then took the software back and made his subordinates try it. After six months, he could not help using my product because his subordinates had got used to the software.

If I had given up the chance of interacting with the customer only because of his dislike of my product, I would not have gained the opportunity to make a deal with him. Because I view the business in a different way, which is to give but not to get, I created chances for further interactions. Because the software was given, some interactions such as training and maintaining followed after. Because the customer gradually understood the product and the services with which my company provided, he trusted to have a deal with us. The more interactions we shared, the more trust we gained. The experiences of interacting with others made me feel that I could access other people's world as long as I kept exploring their requirements. My experience also taught me that as long as I could grasp any chance for interaction I could have possibility to continue the relation. However, how could I find or create the chance?

3.4.5 Rejections

Although people in the area did not want to be interviewed, their rejections still implied some possibilities such as *'if you come here, you may find someone to interview'*, *'we are so busy'* or *'why do you always interview us'*. Their rejections may not have been a sign of their rejection of me, but because of their general impressions and experiences of this sort of research; I thus found myself incapable of solving the problem when their prejudice was too strong. I cite for instance the case of a supervisor who displayed a rather snobbish attitude to my invitation. He did not consider my research schedule, neither did he respond to my invitation; but with a rigid and stern look, he simply said 'No'. I could do nothing about his rejection except

leave. At times I did not have an opportunity for interacting with potential interviewees, nor was I given a chance to convince them to change their minds. At others, however, if I felt a minute possibility that the subject might be willing to co-operate but felt oppressed by his colleagues, then I would soon act to convince him to think beyond his group identity and remain part of the research. I cite also another incident which occurred when I telephoned some of the employees in the TPG, who were initially persuaded to be interviewed. They soon made excuses and cancelled the meeting after they consulted their colleagues, in an attempt to recruit them to take part in this project. This resulted in the loss of those participants.

3.4.5.1 Implications behind Rejections

This situation implies that there were certain influences on employees within the organisation and the influences were shifting and being reinforced along with employees' interactions. Although most of them rejected my invitation on the phone, some of them suggested that I could go to their workplace directly to see if anyone would like to be interviewed, implying that such would be the most convenient way to approach workers. However, and in spite of my personal reservations towards this approach, I eventually decided to try it after 3 people suggested it.

I was made to understand that they might be very busy so that I could only interview them when during their break. Nevertheless, this sort of busy situation had never happened before. Was the influence from the downsizing policy so strong that public servants' lives were totally different from before? This situation was possible, because Ms. D had described, in the pilot study, her workload as 'too much to bear'. Ms. H echoed Ms. D's opinion and pointed out that some employees in the headquarters of the TPG had very heavy workloads because of the policy. If the situation was true, I

was wondering how I could get into their busy life to ask them to share their stories. Another hint I received was that it seemed that they wanted to help me but they couldn't, because they were members of the group. This might also illustrate that some invisible networks were rigidly embedded in the organisation and so repelled the outsider (me). These interpersonal networks are also revealed in many cases of this study, which seem to construct the TPG as a particular community which is different from general bureaucratic organisation (this will be introduced in chapter 4 and 5).

3.4.5.2 Establishing Trust

Even though the networks were too rigid to approach, under certain conditions the researcher can still have a chance to penetrate the 'community'. Using door to door is not a polite way, because this method of approaching people is often thought of as typical of a salesperson who is sometimes associated with rude and offensive behaviour. In order to access interviewees, I took out my identification of a researcher and made myself looked as one of the public servants. I did not know what they viewed me as, maybe a salesman or maybe a specialist from other departments. However, when I met them face to face, I stated my intention and invited them to the interview. Considering ethical problems, I worried about whether or not my visit disturbed their work. So, during the interviews, I asked them to let me know as soon as they were not available. I also tried to let their supervisors know what I was doing and to invite them to interview, mainly to put the participants at ease.

One of the few advantages of conducting research by the method of door to door is that the researcher can communicate with the targeted interviewees face to face. Face to face communication includes not only oral language but also body language as well as other possibilities for communication, so that the opportunities for being accepted may

be more than by telephone. Even though the interviewees might think I was offensive in the beginning, I might be able to catch chances to switch their negative impressions to positive ones as long as our interactions kept proceeding. This sort of thinking was proved correct soon after our interaction started, because I successfully gained the data I wanted through this approach. However, the starting point was difficult, because the atmosphere in the organisation was so rigid that I couldn't approach any of them: even the doorkeeper kept me away from the building.

3.4.6 From Trust to Interaction

People in the middle or south of Taiwan sometimes are thought of as being friendly. They are always associated with the human touch in their thinking. In the general Taiwanese view, people in this area are more honest, simple and compassionate than the people in the north. I do not assert that the viewpoint is true, but this point of view echoed my experience doing the 'door to door' interview. Although the doorkeeper stopped me, I telephoned one of the employees and told her that I was from Taipei (in the north) and was in the main gate of the building at the moment. Even though she refused to be interviewed immediately, I asked her to make the decision after looking through my schedule. I promised her that I would not ask any sensitive questions. She said, '*Since you have arrived, OK, I can have a look*'. She seemed a person who could possibly be recruited. Because I had had her permission, the doorkeeper could not stop me again. However, she told me as soon as we met that she was not the appropriate person to be interviewed and she hadn't even seen any of my questions. After scanning through the schedule, she kept saying that she was not appropriate and suggested that I visit the head of the department. I asked her if there was any sensitive question in my schedule. She replied that there was no question she couldn't answer, but she did not want to be interviewed.

This experience gave me some hints: at first, she could agree to have a meeting with me, because she could sympathize with my efforts and sincerity. It seemed that the woman saw me as a guest so that she didn't mind giving me a chance for reviewing the questions. In her mind, she probably thought that it is an important and basic courtesy to treat guests in a friendly way, especially when the guest was from a faraway city. Similar things happened when I visited other institutions in the same area. Their responses made me recall the influences of Confucianism on the education system in Taiwan.

Confucianism has been embedded in Taiwanese education system for a long time. Confucius said: "*Isn't it a pleasure to study and practise what you have learned? Isn't it also great when friends visit from distant places? If people do not recognize me and it doesn't bother me, am I not a Superior Man?*"(WWW, The Analects of Confucius 1:1 , Update:1997). I am not sure if Taiwan is the place where Confucianism affects people's life most deeply. Confucianism may have a certain influence on the people if the education system is not too bad. Many experiences made me realize that 'treating guests in a friendly manner' seems very important for the people who live in the area when they consider about whether or not to accept the invitation for interviewing. So, when an important thing in their mind (accepting the interview) is against the promptings of their group identity (rejecting the interview), the individual faces a dilemma. However, since I was able to speak to the employee face to face, I could then get the chance to solve the dilemma.

Second, they seemed afraid of saying something wrong or doing something different from the policy, so the employee whom I met suggested that I meet the head directly.

Third, her attitude to whether or not she would be interviewed changed rapidly. It was perhaps because she had evaluated the situation by herself and decided to reject the interview. It was also possible that she had had some suggestions from their colleagues so that she determined to refuse it. There were hundreds of possible reasons for her to reject me, but I had learnt that as soon as they agreed to be interviewed, I had to interview them immediately. I could not give them the time to re-consider the matter. I told myself, 'To keep interacting is the best way to obtain their trust'.

3.4.7 Gender Issues

Because of using the door to door method to approach interviewees, sampling bias became one of issues of the research. Tellis (1997) suggests that case study research does not focus on sampling, but tries to '*maximize what can be learned in the period of time available for the study*'. Even though I did not focus on generalization, each case that I demonstrated implied its unique gender background and so might affect the justification of connections between cases. For instance, in case 1, only 1 female interviewee out of 6 was available, yet on the other hand, only one male subordinate was interviewed in case 3. In case 2, three women and three men were recruited. Although both case 1 and case 3 demonstrated two extreme interaction styles, I was not sure whether or not the differences between both cases derived mainly from the gender issue. Although the gender issue was not the key to this study, it was also necessary to pay attention to the unique feature in both cases. Table 3.10 shows the details of the three cases.

Table 3.10 Details of the Three Cases

Cases	Name	Age	Service years	Title	Org.	Date of interview
Case 1	Mr. L	37	15	Subordinate	D9	8, Mar 2001
Case 1	Mr. M	36	12	Subordinate	D9	8, Mar; 9, Mar 2001
Case 1	Ms. R	32	9	Subordinate	D9	9, Mar 2001
Case 1	Mr. J	55	30	Supervisor	D9	27, Mar 2001

Case 1	Mr. K	33	8	Subordinate	D9	27, Mar; 30, Mar 2001
Case 1	Mr. R	42	18	Subordinate	D9	30, Mar 2001
Case 2	Mr. X	40	16	Subordinate	D6	8, Mar 2001
Case 2	Ms. Q	28	6	Subordinate	D6	9, Mar 2001
Case 2	Mr. W	43	20	Supervisor	D6	21, Mar 2001
Case 2	Ms. O	34	9	Subordinate	D6	21, Mar 2001
Case 2	Ms. P	44	19	Subordinate	D6	22, Mar 2001
Case 2	Mr. N	41	18	Subordinate	D6	20, Mar 2001
Case 3	Mr. T	54	28	Supervisor	D14	6, Mar 2001
Case 3	Ms. K	33	8	Subordinate	D14	18, Apr 2001
Case 3	Ms. L	40	15	Subordinate	D14	18, Apr 2001
Case 3	Ms. M	43	18	Subordinate	D14	19, Apr 2001
Case 3	Mr. F	28	5	Subordinate	D14	9, Mar 2001

Although opinions from certain groups of people, women and men, reflect those people's view of the interactions, interviewees' gender would not necessarily affect people's interactions in the group. For example, in case 1, there were 9 employees in the organisation and only 5 men were recruited. I could only say that I gained men's ideas about people's interactions in the group, but I could not say that the interactions were mainly formed by men's communications. However, because this research focused specially on individuals' informal learning, it strongly relied on their experiences and attitude to interpersonal interactions. During interviews, I asked not only their opinions about other people's interactions in the group, but also their own experiences of participating in group activities. In this situation, considering their gender differences became an important key to explore reality.

3.4.8 Reliability in Qualitative Research

Some qualitative researchers such as Kirk and Miller (1986:72) argue that qualitative researchers may always have the problem of reliability, because qualitative researchers treat social reality as always in fluctuation so that other investigations cannot replicate the result of the research (Silverman 2000:10). Some criticisms of qualitative research are about its validity, because the complaint of 'anecdotalism' may imply that the researcher appeals to a few examples of some apparent phenomenon yet has made no

attempt to deal with contrary cases (Silverman 2000:11). However, since the characteristics of social reality include uncountable and interacting variables, the researcher cannot ignore these variables when exploring reality.

The existence of uncountable and interacting variables does not mean that the researcher can have no worries about whether the research instruments measure accurately, but implies the difficulty of replicating the result. The difficulty of replication does not prove that this sort of research is unreliable. According to Blaxter, Hughes and Tight (1996:200), the research might be judged reliable if another researcher could re-examine the same questions in the same setting and they could lead to essentially the same results. From this point of view, it seems that most qualitative researches do not deserve to be criticised as unreliable on the grounds that they are difficult to replicate. However, on the same page, Blaxter, Hughes and Tight mention that '*the concept of reliability has to do with how well you have carried out your research project*'.

It seems to me that reliability cannot merely focus on whether or not the result can be imitated, because the 'how well' implies not only the result but also the process. If the characteristic of the research cannot allow it to be redone, the process of the research might be thought as a key to judge whether or not the research is reliable. If the process of research is rigorous enough, the research can, in my opinion, be viewed as being reliable, especially when the research objective is always in flux. For example, Strauss and Corbin (1990) developed a series of steps to undertake grounded research. Each step includes the researcher's rigorous reflection on the research process. Because dealing with the questions such as 'how' or 'why' strongly relies on the researcher's established knowledge, the researcher tries to make the process objective

(Yin's attitude to the case study method) or to question findings from varied angles (Strauss and Corbin's attitude to the grounded theory) for fear that reality is distorted by the researcher's prejudice.

In the debates between positivists and post-positivists, post-positivists believe that '*all observation is fallible and has error and that all theory is revisable*' (Trochim 2001). According to Trochim (2001), since individuals are all biased and all of their observations are affected, the only hope for obtaining objectivity is to triangulate across multiple fallible perspectives. The method of using triangulation across these multiple erroneous sources is by way of criticizing. The truth may gradually be approached, if truth-seekers keep criticizing each other's work. Accordingly, the quality of a piece of qualitative research cannot be judged only by reliability or validity, but also the researcher's attitude to seeking truth.

3.5 Summary

This chapter has described the research methods and procedures adopted in this study. In order to extract some features from people's interactions, I put my emphasis on public servants' experiences in the TPG. I viewed the groups that I visited as a whole and all the interactions within the organisation were related to individuals' attitude, the bureaucratic system and the leadership styles. In order to explore and analyse the situation in depth, I used the case study method to conduct my research. Adopting the method of 'case study' to realise the whole situations of organisations presents a dilemma: the case study method allowed me to explore some subtle relationships in depth within the organisation, yet it could not guarantee that the situations which had happened in the studied organisation would be observed as well in another organisation.

Haig (1995) suggests that the researcher does not approach reality as a *tabula rasa*, but comprehends relevant data and abstract categories from reality. Research methods are, in my opinion, tools that enable a researcher to comprehend facets of reality. They can be seen as a bridge between researcher and reality. Each method has its advantages and disadvantages. The decision of choosing research methods depends on the researcher's attitude to the research. In order to highlight his or her assumption or to realise the subject which he or she wants to focus on, a researcher carefully considers the relationships between research goals and methods.

Evaluating the results that he or she wants to obtain and the risks that he or she may experience, a researcher chooses the research method to make a research possible. In other words, the choice of research method is based on a researcher's established knowledge and the knowledge that he or she is going to explore. Doing research is not merely for the purpose of exploring realities outside of the individual, but also for the sake of revealing the researcher's view of the world. The view of the world, which derives from one's established knowledge, directs his or her decision in choosing research methods and also his or her attitude to the research. In other words, the established knowledge and the new one bring about each other. Situations such as the above imply that knowledge is accumulating and shifting, which enables a researcher to adjust different research means to the changes of the situations.

Chapter 4

The TPG and Employees' Lives in the Organisation

This chapter attempts to explore the learning environment in the TPG in order to highlight its particular characteristics and to relate them to some key elements in the concept of CoPs. The focus of this study is on those people who had been working in the provincial government and who, as a result of the downsizing policy, were assigned to the central government. In order to distinguish these people from general public servants in the central government, I use the term 'TPG' to highlight their particular identification. 'Learning environment' here means the bureaucratic organisation that is embedded in the particular organisational culture of the TPG. Within these particular circumstances, knowledge activities may be improved or hindered by interpersonal interactions that are also affected by the environment.

The aim of this study is not to argue that the TPG should be viewed as a community of practice nor does it claim that the TPG has either included or been involved in communities. The research is based on Wenger's (1998:6-7) assumption that there may be diverse communities of practice coexisting in an organisation. According to the data collected, I have noticed some similar factors which corroborate Lave and Wenger's (1991) assumption, even though I did not explore each community further by way of using participatory observation. The aim of this research is to scrutinize individual interactions with formal and informal connections within the bureaucratic context. Exploring employees' lives, I will find out some reasons that may explain interactions between individuals, the key person in the group and the system.

Relativity is a fundamental consideration in this research. This concept also informed my choice of the TPG as a case to study. I will argue that learning activities and

knowledge processes are neither automatic nor self-activating; on the contrary, their effectiveness is related to what the individual identifies as important. Learning occurs once particular stimuli have impressed themselves on the individual's consciousness. However, whether or not the individual's learning is triggered does not depend on the objective importance of the stimuli, but on the extent of the individual's attention to them. If the impact is significant to the individual, he or she may pay more attention to the event so that learning may prove more evident. In a way, this suggestion echoes Mezirow's (1981) idea about transformative learning. Based on the concept of transformative learning (Mezirow 1981:7), I viewed the downsizing policy as a discordant experience which might lead members in the TPG to a learning sequence. Horton and Reid (1991:42-45) suggest that downsizing may result in changes of employees' attitudes toward morality and taking risks, and thus lead to changes in the organisational culture. In this case, even though learning may happen at any time and anywhere, it may become more obvious when people are facing a turning point than at other times.

This chapter consists of two sections. The first section focuses on a general introduction detailing the history of the TPG, its status and describing the downsizing policy. In the second part of this chapter, I will utilise my interview data in order to provide a portrait of the lives of individuals in the TPG and their interactions with their supervisors and the system. In order to illustrate people's lives in the organisation, I have quoted and summarised interviewees' opinions to explain the influence of culture on people's interactions.

4.1 An Overview of the Taiwan Provincial Government

Since 1955, the TPG began sitting in Chung-hsin New Village (Chen 1999: 24), a beautiful community in Taiwan's Nantou County. Government workers live in attractive residential areas where they are not far from their offices (Jaung 1997:6-8). All interviewees suggested this as a perfect place for locating a government community.

It has been over a century since a crisis in coastal defence has occurred. The crisis provoked the Chinese government to divide Taiwan from Fujian, which in turn promoted the establishment of Taiwan as a separate province. Since then, the administrative organisation that was in charge of Taiwan has been given different names over the years. At the end of the Qing dynasty, the provincial government was named "the Governor's Office", but when the Japanese took charge of Taiwan, it was dubbed "Governor-General's Office". After the Second World War, it became known as the "Office of the Governor-General" (Chen 1999:23). Its current title "Taiwan Provincial Government" (TPG) was given in 1947 (Wu 1999:5).

When the Kuomintang (KMT) gained control of Taiwan in 1947, the TPG was established in order to facilitate the running of the island as a province of China. The TPG was kept in existence, because the government believed that Taiwan was a province of China and hoped to it with the mainland in future. Based on this reasoning, the TPG was responsible for the great majority of the province's various administrative affairs, including financial and banking regulation, tax collection, law and order, traffic and transport, agriculture, forestry, fisheries, animal husbandry and education from kindergarten to university *(Taiwan Provincial Government 1993)*. The main exceptions to its responsibilities were aviation, military matters and foreign affairs. For

a long time, many departments in the TPG were either joint with relative counterparts in the central government, or the TPG was in charge of all governmental affairs; for example, the Provincial Department of Agriculture and Forestry (Chen 1999:26) had governed the agricultural and forestry affairs all over the island while the Ministry of Economic Affairs in the central government had only one section dealing with agriculture. Basically, the central government was in charge of policy-making, and the TPG was responsible for implementation (*Taiwan Provincial Government* 1997:61-63). Only two cities, Taipei and Kaohsiung, are controlled directly by the central government (Liu 1997:813-856).

Opinions and assessments of TPG's role and its effectiveness vary. While some critics argued that the TPG had done a good job, because it filled the gaps between policy orientation and its implementation (*Chun-Hwa Daily News* 1996.12.15:2), others suggested that the TPG had helped to diminish the conflicts between local governments and to sort out the problems of uneven resources among counties (*Chun-Hwa Daily News* 1996.12.15:2). Another school of thought however, views its role as that of a buffer, enabling government policies to be implemented in a proper way (*Freedom Times* 1996.11.3:2). Some critics gave practical examples to highlight the fact that local governments relied on the TPG so much (*China Times* 1996.10.9:4) and suggested that their relationships were far beyond the central government's imagination (*Independence* 1998.5.13:4).

However, the central government gradually expanded its authority and gained power to dominate administrative affairs by amending laws. It highlighted local self-governance and tried to structure Taiwan as a two-tiered government. Meanwhile the TPG, which

was facing a two-tiered split between central and local governments, slowly slimmed down.

In order to echo the central government's policy, the TPG itself also proposed a downsizing plan which aimed to slim the system from 29 departments to 18 as well as diminish the 7 levels of bureaucracy to 4 (Juang 1997:8). However this proposal was not put into practice. The proposal which was eventually implemented derived from the consensus in the National Development Conference. The process of the conference entailed a great deal of political operations, which destined the TPG to become part of history.

Even though the TPG itself also realised that organisational restructuring is a tendency for reforming a government, the implementation of the downsizing policy was triggered ahead of time. 31 out of 42 interviewees attributed this situation to political fights. The problem of overlapping authority coming to the fore was highlighted by the provincial governor election in 1994 and the presidential election in 1996. Because both elections involved all eligible people in Taiwan, it looked like the provincial governor's power was similar to the president's. In order to prevent a "Yeltsin effect", the governing party tended to push the downsizing policy. Additionally, the opposition party also agreed with the policy and suggested that the TPG should be totally abolished, because they wanted Taiwan to be independent. In December 1996, a multi-party meeting at the National Development Conference reached a consensus on government reform and agreed to dismiss the TPG. (Zeng 2000:40-55) Regardless of what the TPG suggested, the downsizing policy was included in the schedule. Because analysing the political affair is not the focus of this research, I will not explain the event in detail. However, because most of interviewees (31 out of 42) believed that the

downsizing policy was not conceived for the purpose of enhancing administrative efficiency but was more a matter of political conflict, I think that this image might affect employees' attitude toward their official business and also to the policy.

Following the consensus, the 1998 elections for provincial governor and provincial assembly deputies were suspended. All work undertaken by the TPG before was reassigned either to the central government or to the local authorities. In accordance with new clauses added to the constitution, the work of the TPG would in the future be legally defined.

4.2 The Present Status of the Downsizing Policy

The TPG has run for half-a-century, since its establishment in 1947. It started with 14 departments (including halls, sections and councils) and, at the time of the downsizing, it boasted 29. Apart from these 29 departments, the TPG embraced 2 sub-ordinate agencies, 211 affiliate agencies and 170 provincial schools. In 1999, the TPG had 126,356 employees in all (*Central Personnel Administration* 1999:14).

4.2.1 A New Role for the Organisation

According to Tursman (1994:32-35), in order for downsizing to be effective, the organisational structure might need to change, by trimming product lines and reallocating work. After the first phase of downsizing, the provincial government has been organised around 6 departments, 5 offices, 2 committees, a temporary committee and 13 subsidiary bodies (*Central Personnel Administration* 1999:13). The 29 departments which existed before were completely abolished. Because of the downsizing, the TPG has lost its powers to budget, hold assets, legislate, hire

personnel and levy taxes. Instead, its function has become similar to that of a cabinet ministry (Wu 1999:55).

4.2.2 Impact on the Human Resource in the TPG

Unlike other downsizing performances, such as the State Enterprise Reforms in China (Morris, Sheehan and Hassard 2001:697-698), the TPG's was milder. A report published in 1999 announced that there were 1,327 TPG employees leaving the public service system; It also stated that 124,041 workers had moved to the central government and that 52 had been reallocated to other departments. Only 957 employees were kept in the TPG, 45 of which were expected to leave the system the following year. (*Taiwan Provincial Government Functions, Business and Organisation Adjustment Committee* 1999:12) According to Article 9 of the Additional Articles to the Constitution and the "Preliminary Regulations Governing the Taiwan Provincial Government's Functions, Business and Organisation" (PR), three ways have been adopted to deal with human resource problems during the process of downsizing: early retirement, position relocation and natural wastage (*Ministry of Interior* 1998:7-10)

Early Retirement

Employees who had served for sufficient years would be offered the option of taking early retirement. When they wished to take this retirement, they could receive a generous severance payment which amounted to up to 12 months of their salary. (Article 15 of the PR)

Position Relocation and Discharging

Employees who wanted to continue their career in the public sector would be, according to their specialities and choices, transferred to either central or local

government. Employees, who were dissatisfied with both transfer and settlement, could apply for a discharge or layoff. (Articles 12 and 16 of the PR)

Natural Wastage

Because employees were moved from the TPG to the central government, the number of employees in the central government would increase. In order to bring this number down, particular positions would not be replaced when these employees retired (Article 11 of the PR).

4.2.3 Three Phases of Downsizing

The process of downsizing was divided into three phases as follows (*Taiwan Provincial Government Functions, Business and Organisation Adjustment Committee* 1999: 1-2):

Phase One

The first phase was scheduled to last from 21st December 1998, until 30th June 1999. This phase began with Dr. Shou-Po Zhao's appointment as Governor by the Executive Yuan, which also established the Provincial Commission. During this period, all departments in the TPG were to remain working as they had done before. The main tasks in this phrase were to schedule human resource and organisational replacement, to confirm the protection of employees' right, to complete a transitional budget and to plan necessary regulations.

Phase Two

The second phase, which was viewed as the process of implementation, was scheduled to run from 1st July 1999, to 31st December 2000. However, this phase has been

deferred until 31st December 2004 (*Research, Development, and Evaluation Commission* 2003). The main tasks in this period were to complete modifications to the TPG's functions, reassign responsibilities and restructure administrative duties. Each agency was also asked to modify its regulations as well as its organisational structures.

Phase Three

The third phase will last from 1st January, 2005 until the end of the interim stage. In this stage, the TPG's power would be returned to respond to the framework as outlined in the Local Government System Act.

4.3 Individuals' Life in The TPG

The introduction in the previous section has outlined the situation of the TPG, which includes its history, its present situation and the downsizing policy. However, policymaking is one thing; policy implementation is another. From the policy making to its implementation, the individual who had been struggling with changes of the environment experienced a learning journey. According to Gadamer (1976), when people try to interact with others or with the environment, they find themselves transformed by the interactions. Gadamer used the concept of dialogue to highlight the knowledge exchanges happening within the process of interactions. Because the event, as working within the downsizing institution, is important to the individual, he or she may have no choice or may prefer to struggle with the change. Devoting him or herself to the struggling, the individual may engage in critical reflection on his or her experience so as to be aware of how and why his or her unproved theories have influenced the way the individual understands the world (Mezirow 1991:67).

In order to picture the lives of typical workers in the TPG and to understand their learning within the changing environment, it is necessary to know more their interactions with the system and with their colleagues. The term 'TPG' in this study does not indicate those people who are working in the Taiwan Provincial Government but those who had worked in the provincial government and were assigned to the central according to the downsizing event. All the interviewees who were recruited for this research fell into this category.

The main focus of this research is on how and why people interact with the bureaucratic organisation. In order to understand how the system runs in practice, people's feelings about their own performances and the circumstances in which they find themselves cannot be ignored. Who are the employees? What do they do? What is their life in this environment like? How does this system work? These are the questions that need to be explored further.

4.3.1 Who Are the Employees?

Successful achievement of a national examination is a pre-requisite to becoming a public servant in Taiwan. In order to maintain the standard of public servants, very few applicants are allowed to pass the examination. According to the 2002 statistics, there were 10,984 people who registered for the senior national examination in administration; of these 8,232 attended and only 426 candidates were recruited (*Examination Yuan* 2003). The pass rate was about 5.17%. Even though the examination is difficult, a great number of people continue to apply. In 2001, for example there were 11,015 candidates competing for the senior national examination in administration, while in the year 2000 there were 9,193 (*Examination Yuan* 2003). Passing the examination is not a matter of luck: it is necessary to take time to prepare

for it. The examination system for recruiting public servants puts stress on a fair, equitable, and transparent process to examine applicants' professional knowledge. Situations such as the above indicate that the examination is difficult and the people who are selected may have a certain quality of professional knowledge.

There are however, two pertinent questions to this analysis: why do people try to pass the examination again and again? And why does a significant number of people apply to public servants' posts every year? To answer these questions, it is necessary to understand the significance of a public servant's life in Taiwanese society.

According to this research's pilot study which was conducted in April 2000, every interviewee agreed that the public servants' life and the working environment were important conditions when they considered registering for the national examination. According to interviews conducted in 2001, 28 out of 32 interviewees agreed that a public servant's life in Taiwan is stable and 25 out of 32 believed that their wages are tolerable. 15 male interviewees out of 19 suggested that a stable career was one of their original motivations for considering this career. All the female interviewees agreed that stable working conditions are a critical motivation to choose the career. Although it may not be appropriate to generalise these findings to all the population in Taiwan, due to the small sample size, yet these opinions provided a starting point which enabled me to start exploring their life within the system.

4.3.2 What Do They Do?

These outstanding people, who qualified by proving themselves in the difficult national examination, end up undertaking relatively simple and uncomplicated tasks. Most interviewees (28 out of 42 people) in this study indicated that public servants can

easily master their job, unless the individual is '*too stupid, too nervous, or too evasive*' (Mr. U).

The tasks required of individuals in an administrative division seem to be not complicated. According to Mr. U., '*The profession, to be honest, has no barriers for novices whose professional knowledge has been proved by national examinations*'. Additionally, because the public sector is a vast and bureaucratic organisation, the division of labour is so rigid as to make each one's tasks simpler and easier. Most recruits (33 out of 42 interviewees) could grasp the nature of the work and could become familiar with the operations within a very short period.

The learning situation in the public sector seems quite liberal, because most public servants can master their time in the work place (28 out of 42 interviewees agreed to this) and so they may be able to engage in learning activities if they wished to do so. This liberal situation applies only when employees have completed the tasks demanded by supervisors or regulations (Mr. A). In the TPG, certain performances or management items are regulated by the law. Public servants are encouraged to follow ready-made solutions. Most employees, in fact prefer following regulations so as to avoid careless illegal disputes (every interviewee agreed with this idea). Nevertheless, because the law has controlled most management functions, the role of a supervisor has gradually withered (Mr. H thought that the government did not pay attention to cultivate good leaders). Employees could then find some vacant spaces that are out of regulation controls, so they have a self-dominated life apart from those regulated performances. For example, some employees such as Ms. B, Ms. D, Mr. B and Mr. C suggested that their supervisor did not put too much pressure on them once they had finished their tasks.

The liberal situation also allows a new employee to find out his or her own ways to sort out problems. New comers may start by '*studying some regulations and handbooks to become familiar with where they are, reading instructions to know what they should do, and reviewing archives to know how to do their work*' (Ms. A). Generally speaking, most new employees in the public sector will imitate the practices of their predecessors to deal with tasks (Ms. A). In the very first stage of a public servant's career, it is inadvisable to undertake tasks using personal methods, because it is thought that such behaviour always leads to negative results (Mr. D). Experience in dealing with tasks will teach newcomers to follow their predecessors' methods (Ms. D). However, this may be a way for an organisation to model and shape employees' behaviour.

4.3.3 How Do Supervisors Facilitate Employees' Learning?

Because of the liberal environment for completing tasks, one's self-discipline becomes important. Self-discipline not only affects one's performance, it also influences one's learning within the group. According to Ms. E., '*Everyone has his or her responsibilities and can control the progress of work owing to the very serious division of labour*'. Ms. E used the term 'serious division of labour' to express that the wordload in the environment has been divided into small pieces and distributed among colleagues. The more serious the division of labour is, the less the workload (Ms. E). Gradually, employees in the system have little load of work and take simple responsibilities. People taking simple responsibilities are supposed to be able to concentrate on tasks more so that the quality of their performances may be expectable. However, this situation also renders tasks tedious to the extent that the results of both individual and organisational learning become uncertain. In a way, performing simple

routines is considered the origin of people's lack of skills; in some cases, a simple working environment provides employees with the space required for reflecting on their performance, while organisational routines also reflect tacit knowledge embedded in members' interactions. This notion will be discussed in detail in later chapters.

Because the bureaucratic system has been run for a long time, most management functions belonging to supervisors have been taken over by the system. A supervisor's duty is mainly to examine whether or not the individual completes his or her work in time (Mr. A). Some supervisors do not want to ask the individual to adopt their ways to complete tasks. Even so, supervisors' advice still affects, in some cases, individual's behaviour in the organisation. Supervisors' influences are however, not as powerful as in private companies. One of the reasons for this situation might be that supervisors in the public sector cannot affect employees' salary (Ms. A); another reason is probably that they can neither dismiss employees nor punish them instantly when something wrong happens (Mr. U). Because supervisors' influences are limited, some interactions that may steer individual or organisational learning are, in some cases, controlled by informal leaders or connections (which will be discussed in later chapters). The only way usually adopted by a supervisor to encourage good practice or to punish faults is by giving employees a mark that is related to each one's annual appraisal (Ms. A).

4.3.4 Annual Appraisal

Annual appraisal is, in the TPG, a key point which may affect employees' behaviour, and the results of the appraisal are closely related to individual promotion, task assignment, and bonuses. It is true, as Ms. A says, that '*an employee can still get an annual increment in salary even though his or her annual appraisal is not satisfactory*'. Nevertheless, he or she can get more money if the result of the annual

appraisal is good. The bonus is normally about one and a half times the monthly salary (Mr. B). Although this is not a substantial amount, employees appreciate the extra money, and consider it as a kind of encouragement. The result of one's annual appraisal is one of the keys for promotion. Only when certain criteria of the appraisal have been achieved, can the individual be considered for a higher position. Although promotion seems inevitable in these circumstances, yet there are many colleagues with similar qualifications waiting in the queue; thus a good appraisal gives some indication of good performance and makes promotion more likely (Mr. A).

Some interviewees (Ms. A, Mr. J and Mr. U) in the positions of middle management or department head, point out that money is not the most important motivation to stimulate individuals' performance in the TPG. Employees enjoy a well-paid job which also ensures them a certain degree of security. Not only is the TPG's salary scale considered generous compared to the private sector's, but employees are also comforted by the stability of their salaries (38 interviewees out of 42 agreed that the salary is stable). This has two implications: first, the individual has no worry about the influences of shortage of income on his or her life. Second, this also implies that, for most interviewees in this study, the quality of life seems more important than the quantity of income to motivate them to work. Most interviewees (35 out of 42) agreed that they were satisfied with their salaries, even though they confessed that money is not always sufficient. This sort of life with a stable salary and less working pressure was just what most employees wanted. These people believed that their wages were not very high but were reasonable compared with those in the private sector.

However, do situations such as the one above mean that money is not the key point to stimulate their working performances? One interesting facet to this argument is the fact

that the stable salary is the main reason that keeps them in the organisation. However, because of the fixed organisational culture with the slow system of rewards and penalties (Mr. A pointed out that the system of rewards and penalties is slow), public servants were not easy to dismiss once they were employed. Since they need not worry about losing employment and the salary system is fixed, the stable salary that they have already gained cannot be an incentive any more. This situation seems to echo what Maslow (1943:370-390) refers to as the 'hierarchy theory'. When one level of needs has been satisfied, the next level of needs becomes a target to pursue (Maslow 1970). Since money was not thought of as an incentive in the TPG, some interviewees such as Ms. A, Mr. A and Mr. J suggested that the individual's performance in the organisation could be motivated by the promotion system.

According to the law for appraisal of public servants, one's knowledge is one of the criteria of promotion. There are four items in the criteria of appraisal: working performance (50%), ethical standards (20%), knowledge (15%), and capacity (15%) (Zhao 1999:348). '*The higher score you have earned, the bigger chances of promotion you will have*' (Ms. D). Furthermore, any additional training can also help the individual's promotion. According to Ms. A, the individual's points will be increased, if he or she has undertaken any training that lasted longer than a week within the last three years. Scoring points affects the individual's annual appraisal and so is of benefit to his or her promotion chances (Ms. A). However, some might argue that scoring points is a minimal factor in the struggle for promotion because these points represent only a small percentage of the promotion criteria (Ms. A).

4.3.5 Promotion System

The promotion system in the TPG is hierarchical. The various authorities are ranked in relation to different positions in the system. According to the employment law for public servants, the latter are employed by official levels and duty levels. Duty levels indicate different degrees of responsibilities and different qualifications for different positions. There are duty levels for each job ranging from Level 1 to Level 14. The relationship between a job and its duty levels is entirely dependent on the contents of the job. For example, according to the Article 6 of the employment law for public servants, a job can include 2 or 3 duty levels, if necessary (Zhao 1999:168). The 14 duty levels are also classified into 3 Appointment Ranks: Designated (DAR), Recommended (RAR) and Selected (SAR). This classification is illustrated in Table 4.1 below:

Table 4.1: The Structure of Official and Duty Levels

OFFICIAL LEVELS	DUTY LEVELS
Designated Appointment Rank (DAR)	The first duty level
	The second duty level
	The third duty level
	The fourth duty level
	The fifth duty level
Recommended Appointed Rank (RAR)	The sixth duty level
	The seventh duty level
	The eighth duty level
	The ninth duty level
Selected Appointment Rank (SAR)	The tenth duty level
	The eleventh duty level
	The twelfth duty level
	The thirteenth duty level
	The fourteenth duty level

Source: Zhao (1999:164), *Personnel Administration*, Taipei: Open University.

Official levels represent the hierarchies of authority, while duty levels stand for the hierarchies of responsibility. According to the Article 6 of the employment law for the public servants, the jobs which are assigned by the organisational law should be

classified into the job list by the necessary qualifications and duty levels. The supervisors' power to give commands is disseminated in a fixed way and is severely governed by regulations. Therefore, it is clear that each position has been allocated a particular duty level and a certain qualification. The job list also implies a sort of rank by which the individual is given different responsibilities.

According to Mr. G, regardless of whether the promotion system encourages employees' good behaviour and censures their bad attitudes, the system is still important for individuals. If a public servant has passed the RAR Level examination, and if the organisation needs them, then they can be promoted directly to certain positions. This suggestion implies that those people who have passed the RAR Level examination can either be promoted slowly but steadily by the annual appraisal system or be promoted quickly as a result of personal efforts. Those who haven't passed the RAR Level but have achieved the DAR Level examination need to take further examinations if they wish to attain a higher position. According to Mr. G, '*Basically, if you have the RAR Level qualification, you have no limitation on your promotion until you reach the top*'. Situations such as the above made Mr. M plan his career in a different way. In order to sort out the uncertainty which derived from the downsizing policy, he aimed at working in local government in the future. He hoped that he would become one of the managers in the government, rather than only a basic employee. Following this idea, he has begun to establish varied relationships with politicians and expects that political favouritism can get him into the local government. Since he has the RAR Level qualification already, he believes that he could become a supervisor in local government if someone would like to help him to get the position.

There are two ways for a public servant in the TPG to improve his or her position. Gaining a good result in annual appraisal is one way; passing examinations is another (Ms. B). Ms. E believed that taking examinations is usually thought as the fast track approach. *'If you have now achieved DAR in the public service, you have to spend about 10 years working in order to get a qualification to be promoted to RAR. However, there is a short cut. If you take the recruiting examination for the RAR level and pass it, you can be promoted directly to the position without any waiting'* (Ms. E). Most public servants seem to prefer this approach, even though the examination is very competitive. According to my fieldwork data, 10 interviewees out of 42 who had qualified as DAR kept trying to pass the higher-level examination, the RAR. It seems to them that they were encouraged by the pervading culture to study for the examination whilst in the work place after completing the required tasks (Ms. B). Thus not only do they prepare for the examination, but they also carry on with their current job and are appraised and promoted year after year. Situations such as the above seem to illustrate that the promotion system provides people in the environment with an atmosphere for studying. Because study is generally acknowledged as a key way to access knowledge, some people may expect employees in the TPG to be knowledgeable and highly efficient. However, some facts derived from fieldwork show the situation to be radically different. Because employees do not pay much attention to dealing with allocated tasks but spend more time studying for promotion, they in fact missed out on opportunities for accumulating knowledge by way of dealing with those very tasks they ignored.

4.3.6 Spare Time in Work Place

Because of the sharp division of labour, each public servant has been allocated particular tasks which, though seemingly overwhelming in number are nevertheless

unchallenging and uncomplicated. Most public servants take the responsibilities of their work seriously, master the progress of the work, and arrange their own schedules (Ms. C). It is very possible for a public servant to finish his or her work early in the day, and then he or she can do some personal business in the rest (Ms. E.). Because being a public servant is a well-paid job and a public servant's salary is fixed and increases annually by a small amount, low work motivation has become a normal situation. When they finish their own tasks, most public servants will not attempt to expand or enrich their work, but choose to pursue their personal business.

4.3.7 Spare Time after Working

Work time does only provide workers for an opportunity to acquire learning, but this also a time when they can engage in other learning during their spare time in the workplace. A fixed work time gives another advantage for employees' personal learning, because the individual can schedule, in freedom, his or her personal learning activities after work (Ms. O). By contrast, this situation rarely occurs in the private sector. An employer in the private sector can easily raise or reduce an employee's salary when necessary, and he or she can also determine whether an employee is eligible for promotion or must be dismissed (Ms. E). Accordingly, keeping a good relationship or a positive interaction with the boss is of crucial importance for employees in the private sector. For the purpose of giving the boss a positive impression, a worker in a private company always works beyond official working hours for at least some time (Ms. E). The heavy workload in the private sector also gives another reason for an employee to work late. In fact, they do not often leave work on time not only for leaving their employer a favourable impression, but also for reducing the workload (Mr. W). It can even be found sometimes that an employee works overtime without gaining any overtime pay. On the contrary, work time for

public servants is fixed from 8:00 a.m. to 5:00 p.m.. Normally, employees will be able to leave work on time. In order to leave work on time, employees in some divisions may take a short time for preparing before 5:00 p.m.. Usually, they prepare for stopping work at about 4:30, so that they can cease work on time at 5 o'clock (Mr. D). This situation is because public servants' work is neither very complicated nor as heavy as the work in the private sector.

A regular working time also provides employees with opportunities for engaging in learning activities. Because employees in the TPG can freely use their time after work, most public servants can take advantage of this to engage in some learning or development activities. Those activities may not necessarily be good for their working skills. Mr. C said, *'Life after work can be very diverse. We just do what we want to do. We may do some social things, enjoy family interactions, or attend some training programs'*. Some employees in the TPG do engage in learning programs in their leisure time. For example, Mr. M is now studying for an EMBA at Dar-Yei University. Ms. O is using her spare time to go to the University in order to earn a Master's degree. Mr. S is now studying at the National Chung-Shine University. Mr. O is also reading for his Master's degree at Chung-hwa University. In addition to their familial responsibilities, these people insist on pursuing their aims in life. They all agree that they are lucky because it is the system in the TPG which supports them to keep learning.

4.4 Some Influences

4.4.1 Simple and Easy Tasks

The developed division of labour makes tasks simpler and easier, which also implies that employees have fewer demands to learn new skills in order to cope with

difficulties. Almost all recruited people (30 out of 42) can realize the contents of the work and become familiar with the operations during a very short time.

Those people who have passed the difficult examination undertake a relatively small responsibility within the organisation. Quite often, their work is different from the subject that the examination tested (Mr. B). In addition, the contents of the work are very simple. Most people without higher education could manage the work very well (Mr. C). Why does the government ask the overqualified people to perform easy tasks? This seems to imply that the organisation is too big and lacks the necessary resources to examine each candidate's expertise; consequently, the connection between the examination and the work is weak. This also implies that the developed division of labour in the TPG has already well distributed all the tasks for every position so that each task becomes simple and easy.

Because of the division of labour, every employee in the public sector shares only a part of the responsibilities. Thus the tasks for the individual can be easily learnt and completed. I cannot deny that some parts of the responsibility are difficult, yet most of them are simple. Because the tasks are not difficult, it is not necessary for an employee to work overtime or to stay in the organisation longer (Mr. C).

4.4.2 The More You Do, the More Mistakes You Might Make

Because civil services in Taiwan are rigidly regulated by the law, public servants may easily be sued for malpractice if they make a mistake (Ms. D). Employees in the public sector hope to work without making any mistakes (Mr. D), but are not concerned in meeting organisational goals. According to Mr. B, '*They believe that the more you do, the more mistakes you might make. You will make no mistake if you do nothing*'. That

is the reason why most public servants seem not very enthusiastic about other's work but only concentrate on their own. All they want to do is to complete the tasks their supervisor formally assigns to them. The other things which may be emergent and important will be assigned either to novices or to more energetic colleagues.

4.4.3 Individual Capability and Responsibility

For those conscientious workers, all they want to do is to complete the tasks their supervisor formally assigns to them. People who have no desire to work take the responsibility for the simple parts and try to avoid difficult ones (Mr. A). Challenging tasks are relegated to a blurred area, and everyone avoids them as Mr. D confessed. In these situations, supervisors play a critical role. In order to run the organisation well, supervisors have to either ask someone to take on those difficult parts or complete the tasks by themselves. It is usual that lazy employees are not willing to take the parts so that only conscientious ones might possibly help (Ms. C used the terms "lazy" and "conscientious" in interviews). Accordingly, those difficult parts might be assigned, in the end, either to novices or to those energetic colleagues. Gradually, conscientious workers with enthusiastic attitudes take the majority of responsibilities and are gradually tired out with their heavy load of work. Those who are less conscientious have lots of free time to enjoy the newspaper or chat with others (Ms. C). A negative culture in the organisation has been formed where the more capable the individual is, the more responsibilities he or she may take.

Situations such as the above reveal an interesting fact: most interviewees did not admit that they themselves were part of those less conscientious even though I could tell, by way of interviews and their colleagues' opinions, that some of them were not very enthusiastic about official business (I use the term "less conscientious" after Ms. C. the

"official business" is the term that is used by interviewees to describe their tasks in the TPG). However all of them seemed to agree that the lethargic atmosphere was a big problem in the public sector. The main focus of this finding is not on whether or not the individuals such as the above are lazy or conscientious, but on the fact that all employees, whatever their personal reputation for industry or indolence, agreed that the atmosphere in the public sector was inefficient. Their general statements about the TPG enable me to write it up as a context of this study.

Although I was not allowed to stay longer in the organisations to observe their routine, I could still approach part of the truth through conversations with interviewees. According to Thomas, Kellogg and Erickson (2001), knowledge is bound up with human intelligence and is shaped by social context; conversation is a fundamentally social process for '*eliciting, unpacking, articulating, applying, and recontextualizing knowledge*' (pp.876). Through interviewees' general statements about the TPG and their experiences of working in the environment, I constructed my understanding of their interaction with the system. Apart from documentary materials, the general statements that they made about the organisation became the main resource I relied on to explore the context in which the TPG operated.

Because of the understanding that the more capable the individual is the more tasks he or she may undertake, some workers try to avoid responsibilities so that conscientious ones have taken the responsibility as usual. People in the organisation may unknowingly get into the habit of loading more and more tasks onto the shoulder of the hard-working colleague. The excessive work is imposed the latter because the individual is capable and enthusiastic. The desire to become a capable worker is, finally, destroyed. The immediate reason that causes this situation is that under the

condition of employment security, supervisors have not enough power to give orders to employees. The deeper origin of this problem is that supervisors' management power is limited by Zen-chin.

4.4.4 Zen-chin and the System

Zen-chin indicates a particular pattern of interpersonal interaction, through which both parties do not want to break their harmonious relationship (although it may be only an apparent amicability). Because of Zen-chin, supervisors tend to maintain a good relationship with colleagues so that they hesitate to punish employees even when discipline is necessary. From the angle of motivation, supervisors in the environment have no desire to break a harmonious atmosphere to correct employees' inappropriate performances.

On the other hand, supervisors in the public sector are also public servants whose salary and promotion, just like those of other employees in the sector, are protected by law. Since a law guarantees public servants' working conditions, such as wages, promotion, or well-being, the management functions of a supervisor (such as leadership, motivation, and so on) have largely fallen into disuse. The bureaucratic system includes not only hierarchical authorities but also the hierarchical atmosphere and the procedures. Within these circumstances, punishment cannot be imposed in time on those who deserve it, so that supervisors' power of management is limited. Supervisors cannot bring their power into full play to discipline employees' behaviour (Ms. A), just as their superiors cannot affect them. The law entitles supervisors to manage their subordinates, yet it doesn't really give them the power to do so effectively.

The above situation seems to indicate that people's interactions in the environment such as the TPG are influenced by the particular culture, such as Zen-chin, and the bureaucratic system. Zen-chin is not peculiar to the public sector: it can be found at any place in Taiwan. However, because Zen-chin is mixed with the particular characteristics of the bureaucratic organisation, a unique environment for learning is developed. Both Zen-chin and the system interact with each other; some characteristics of both sides are reinforced so as to make their influences on people's interactions very strong. We are not sure whether or not the TPG is generally recognised as an example of a bureaucratic organisation, yet thanks to Zen-chin and the system of the TPG it has many features of a bureaucratic organisation while retaining other features unique to itself. The particular culture and the system will be discussed more in the next Chapter.

Chapter 5

Discussion: The Culture and The System

The focus of this study is not only on how the public servants in the TPG interact with the system, but also on the other side of the same coin -- specifically, why they behave like that. The previous sections took a broad approach towards identifying and highlighting the questions about 'how', while the following sections are going to explore the 'why' questions. Two angles of analysis will be adopted to look at the issues: the culture and the system. To this end, I intend to offer in this section a clearer picture of the ways in which both topics influence knowledge creation in the environment.

In the previous chapter, an important characteristic of the TPG, Zen-chin, was mentioned. This feature is the starting point of this chapter. Because of the influence of Zen-chin, the organisation is a unique bureaucratic organisation which is distinguished from other bureaucratic organisations. Zen-chin also strengthens the influence of employment security, which was formerly regarded as an important feature of the public service in Taiwan. However, Zen-chin is not the only factor at work. Apart from Zen-chin, some other influences of interactions, which derive from the bureaucratic system, will also be analysed in this chapter. I will introduce them through consideration of the general framework of bureaucratic structures, such as division of labour, hierarchies of authority, organisational routines and so on. I do not intend to trace the reasons for these particular interactions in the organisation, but to identify the affected interactions as the base that enabled me to associate knowledge creation and organisational learning. This also provides me with ideas that facilitate the rethinking of the concept of CoPs.

5.1 The Culture: Zen-chin

Zen-chin describes a situation in which the individual thinks highly of his or her good name and public standing. He or she does not want to damage his or her reputation; for the same reason, the individual has no will to embarrass others. This sort of thinking has affected people's behaviour in the society so as to spread to the form of bureaucratic system in Taiwan. Most interviewees believe that it is difficult and needs bravery to give employees a lower score, to say nothing of giving them the lowest possible mark to dismiss them. '*You are a Chinese person; you should not feel strange about this. It is the 'Zen-chin'. Most supervisors do not want to break the relationships and do consider the Zen-chin.*' (Mr. S)

The 'Zen-chin' highlights a very subtle situation within Chinese societies. This situation means that in Chinese interactions, people generally make a conscious effort to get along with each other, at least in public. Even though both parties may be hostile to each other privately, they will try to show an apparently harmonious situation on public occasions. In addition, when both of them negotiate something face to face, no matter whether on a public or on private occasion, some negative words or attitudes will automatically be avoided. There is a Chinese saying 'to meet people face to face has established some friendship already'. This is because most people do not want to make others feel embarrassed or uncomfortable on a public occasion. This sort of thinking makes supervisors unwilling to identify unsatisfactory employees; this situation also makes managers hesitate to give employees a low score during the annual appraisal. Some interviewees, such as Ms. F, Ms. H, Ms. I, Mr. W and Mr. S, have revealed that the main problem in Taiwanese society is not that the legal system is not sound enough, but that public officials have too much opportunity to be swayed by 'Zen-chin' when they come to make decisions.

Zen-chin is important in every area of Taiwanese society, and my main point in introducing it here is not to say that it is more important in the public sector than in the private but to indicate that the influence of Zen-chin on the public services strengthens particular inherent features of the TPG.

5.1.1 Zen-chin strengthens the employment security

It is not easy to judge whether the influence of Zen-chin is positive or negative. It can be used in a positive way, in that the supervisor may be able to team up employees together and also share the work burden among colleagues. It can also be applied in a negative way, when the supervisor lacks the courage to give inefficient employees a lower score. However, the influence of Zen-chin on interpersonal relations may be one of the reasons which makes the career of public service be viewed as a lifelong secure job.

All the recruited interviewees in this research agreed that even though there were regulations punishing passive employees and even dismissing those who made serious mistakes, few employees were in fact dismissed. Three reasons may explain this situation:

5.1.1.1 The Supervisors Want to Avoid Trouble

According to Ms. H, '*We do have a regulation stating that an employee would be laid off if he or she has had two demerits recorded or has been scored the lowest merit. However, there is no supervisor who has the will to do this because most supervisors do not want to get themselves into trouble. Because being dismissed implies that their right to work or survive is facing a challenge, the individual may try to sue the*

supervisor in order to keep the job'. Ms. H's words seem to imply that the reason why supervisors in the TPG have no will to implement the regulation about dismissing inappropriate employees is that supervisors do not want to have the trouble of going to court often. It may be predictable that the employee who is concerned will bring a prosecution, because a matter which is related to one's career is important to the individual. However, if this situation happens in the private sector, the way of and the attitude to dealing with it will be very different. Ms. O gave an example and said, '*in the private sector, employees usually worry about whether or not they will be dismissed and it is common for a boss to dismiss an inappropriate employee*'. Is it because the public servant law is different from the labour law? The answer is probably 'yes', because the process of being a public servant is always regulated by law but being an employee in the private sector is not. However, this answer is, in my view, too simple to explain the situation. On the one hand, the processes of the lawsuit are complicated and time consuming, so few will be happy to be involved into such a kind of thing. On the other hand, this situation is associated with the particular social structure in relation to Zen-chin.

From the angle of identity, public servants are the people who are qualified by national examination and employed by the nation, so that they are special in terms of the style of work and social identity. For example, laws protect their salaries, and their certificates are issued by the nation. There are at least three sorts of resistance when a public servant is suffering as a result of losing his or her status and identity. One is about the resistance of maintaining the gained benefits, because their jobs cannot be kept any more if they are dismissed (Mr. W). Another is the resistance for keeping their identity, because they gain identification through passing the national examination and no one can guarantee they will be lucky to pass the examination again

(Ms. F). The other is about feeling embarrassed, because it is extremely rare for a public servant to be laid off. Others may think that the individual must be very stupid and that that is why the supervisor has got rid of him or her. In order to let others know that he or she is misjudged, the individual will definitely sue for wrongful dismissal (Ms. H).

Since supervisors in the TPG are not willing to experience going to court often, they tend to keep inappropriate employees in the organisation (Ms. H). This situation is different from the situation in the private sector. In the private sector, the boss can always get undesirable workers out even if a lawsuit is unavoidable. In private companies, bosses are aware that time is money and resources are fortunes. Supervisors' salary and promotion are strongly and immediately related to the results of the department which they are in charge of (Mr. V). Keeping inappropriate employees in the company may waste time and resources. The longer this kind of employee stays, the more the company may lose. The private sector cannot afford this sort of loss, so the boss has to face the trouble bravely.

In the public sector, supervisors do not need to concern themselves about whether the organisation earns money or not (Mr. S). Both supervisors and subordinates can always earn a fixed amount of money and follow a rigid and slow promotion system. Neither supervisors' nor subordinates' efforts can affect their promotions in terms of position or salary. So, even though there may be some employees who are slothful and inactive in the department, supervisors have no will to dismiss them (Mr. L use the term "slothful and inactive" to describe general Taiwanese views about the TPG). According to Ms. H, '*If you dismiss them, you ruin their life and you gain nothing but may spend lots of time in litigation. Although you will probably win in the end, you*

have no substantial feedback, such as promotion or encouragement. In addition, because you spend lots of time in going to court, you have no time to deal with current tasks. No one will sort out the tasks for you but yourself'. In these circumstances, supervisors do not want to be severe with those inappropriate employees.

5.1.1.2 Supervisors do not want to be labelled as Unmagnanimous and Unkind

According to Ms. H, '*Supervisors always want themselves to be regarded as kind managers. They followed their supervisors' orders and do not want to offend their subordinates*'. Mr. V agreed with Ms. H's description and pointed out that this situation is, in his experience, normal in the TPG. Mr. N also echoed this idea and explained the reason. He said, '*Everyone comes here for the purpose of earning money in order to have a stable life. It is not necessary to make the relationship tense, because being too conscientious does not mean that you can earn more money'*. This situation seems similar to Ms. H's idea that supervisors will gain nothing but delay their work if they spend time in weeding out those undesired employees.

Mr. U believed that most supervisors in the TPG do not want to be labelled as rigid supervisors, because they lack the experience to deal with trouble. He said, '*The system does not train the individual to become a supervisor, supervisors in the TPG do not know what they should do and what attitude they have to adopt to manage employees'*. Mr. U, who was a colonel in the army, is now a head in the TPG. According to his observation, '*The whole climate in the TPG was so harmonized that most people in the organisation were used to the conciliatory way of interacting with others'*. The organisational climate tends to model the individual as a friendly agreeable person, so a supervisor does not feel anything wrong with his or her leading ability but gives him- or herself the label of a kind person.

5.1.1.3 It Is Impossible to Provide Absolute Proof That an Employee Is Incompetent

Another reason for supervisors' keeping inappropriate employees in the organisation is that supervisors cannot find evidence to prove definitively that particular employees are lazy (This is Mr. V's opinion, and he used the word 'lazy' in the conversation). This is also the reason why supervisors always have difficulty in giving a lower score to those unsatisfactory employees. Mr. U said, '*Supervisors have total authority to determine what score the employee can gain in the annual appraisal*'. Mr. U seems very good at using the appraisal system to manage his employees. However, most supervisors had similar feelings with Mr. V that doing the appraisal is difficult. Ms. I said, '*You will feel sorry for them if you give them lower scores; you will feel sorry for yourself if you give them higher scores. The reason for having this sort of guilt is that we cannot get rid of the Zen-chin*'. Ms. O agreed with Ms. I's opinion that Zen-chin affected supervisors' decisions in giving scores. Nevertheless, she seemed to agree more with Mr. V's idea that the lack of any admitted criterion is the main reason for this difficulty. She said, '*In the private sector, we had an appraisal system which was held quarterly. Some criteria were set to evaluate the individual's performance. Your appraisal was marked by your colleagues, your supervisor and yourself. Your supervisor would then negotiate with you for the appraisal*'. It is true that appraisal always implies a subjective judgment. In order to avoid an over-subjective result, the company in which Ms. O worked took advantage of the multi-channelled system of appraisal. However, this concept does not apply to the appraisal system in the TPG. Apparently, supervisors in the organisation seem very authoritative, because they can give whatever marks they want. In practice, they are burdened by Zen-chin, lacking experience to deal with the situation and constrained by the risk of being sued.

5.1.2 Zen-chin and the Liberal Learning Environment

The environment outlined above does not only strengthen the employment security atmosphere in the TPG, but it also provides people in it with a particular culture to accumulate their knowledge and sharpen their particular skills. In other words, this sort of environment creates a liberal and safe learning environment, which allows employees to try whatever they want to do as long as their methods are not very outlandish. Although in many cases a newcomer is not encouraged to use his or her personal approaches to complete tasks, this restraint does not bother a veteran. Because they do not worry about being fired, they can dare to challenge the established rules in the organisation even though their suggestions are not always adopted. In this situation, the results that derive from interactions between Zen-chin and the bureaucratic system seem to break the power hierarchy of the organisation and make the system only framed by a hierarchical structure and with no clear power authority. This situation is, in a way, a chance to move the bureaucratic organisation toward being a learning organisation or a community of practice.

One of the main ideas of the concept of a learning organisation is to make the power in the organisation equal to each member, so that people can reveal themselves in the organisation to deeply share their insights with each other. The concept of CoPs also highlights an open communication space through which members can sharpen their professional skills by ongoing discussions. In the TPG, employees can express their opinions freely without worrying about promotion or offending their supervisors. However, one of the main problems in this system is how to motivate individuals to present their ideas, how to make people's opinions noticeable and how to integrate individual understandings into organisational knowledge. In other words, this system is

so loose that supervisors do not have enough power to manage knowledge in the organisation, and employees have no desire to participate in group activities.

Although I attribute the loose learning environment in the TPG to the results of interactions between Zen-chin and the system, Zen-chin is not the termination of analysis. Why do people not want to break relationships even if it is necessary for the completion of tasks? Some findings which derived from the fieldwork may also help to interpret the causes of Zen-chin. When supervisors do not want to be labelled as unkind, they are actually bound by their self-identification. The concept of 'self' identifies the differences between the individual and the other colleagues in the group, so that he or she has a base for making a comparison in relation to the individual's reflection and learning. When supervisors do not want to get themselves into trouble, they actually consider the results of their behaviour, which is related to the concept of exchange. The term 'exchange' also implies formal or informal networks by which people acquire useful information in order to achieve their respective purposes apart from the organisational goals.

5.1.3 Zen-chin, Interactions and Learning

In terms of communities of practice, people acquire knowledge through interactions with other members and the environment where they are (Iverson and McPhee 2002:259-266). They also use the knowledge to trigger or to improve further interactions. In this reciprocal process, learning or knowledge is not necessarily the main purpose, but always emerges as a type of by-product. Life and learning are in these circumstances intertwined together, so it is difficult (and in fact unnecessary) to make a sharp distinction between life and learning.

In Taiwan, because Zen-chin, which derives from traditional culture, is a part of life, people and the bureaucratic system are both affected by it. Influenced by Zen-chin, people strive for some goals in order to gain recognition from the group. Through the process of striving for their identifications, people become aware of the differences between things, methods and individuals so that they have a base for comparison to reflect on their ways of dealing with tasks and arranging life. On the other hand, the concepts of interpersonal networks and exchange imply that people exchange their resources by way of formal or informal networks in order to settle themselves appropriately in the group. In this situation, it seems to me that gaining group acceptance and making comparisons are two elements that enable individuals to identify their roles and to improve their learning in the group. Interpersonal networks and exchanges are the points that illustrate how people interact and share knowledge with each other and why they engage in these activities. These four elements will be discussed further in later chapters.

From the angle of management, since Zen-chin is the main reason behind job security, the tools available to supervisors for motivating employees are obviously limited. For instance, supervisors do not want to give bad performers a lower mark. The only way to improve employees' performances is through giving informal encouragement or some unofficial punishment. Under these circumstances, the management in the TPG is just like a person who has two legs using only one leg to walk on. The other leg is deliberately ignored so it not only becomes redundant but also hinders the person from moving about.

Although Zen-chin may hinder some management functions in the organisation and the system seems too sluggish to become efficient, some examples, especially the three

cases which I will present in the next chapter, still highlight the possibilities of creating knowledge (I borrow the word "sluggish" from data, because it implies the meaning of slowness and reluctance). Because an organisation is run by its members, the power which is formed through employees' interactions becomes a complement which enables the system to adjust or to reinforce some effects from cultural influences. The structure of an organisation may be bound by the regulations; the performances of a system can probably be revivified by members' participation.

5.2 The Bureaucratic System

It may be true that there are few similarities between a bureaucratic system and a community of practice, because these two concepts present different facts. However, both ideas are based on people's interactions. In a community of practice, the focus of interactions is on exchanging or sharpening knowledge, but the keys which determine whether or not the community runs well depend on the content and the context of people's interactions.

Traditionally, bureaucracy was thought to be a natural result when an organisation was getting too large for the purpose of supervisor efficiency. Max Weber (1864-1920) believed that the expansion of bureaucracies was an inevitable rationalization process (Elwell 1996). According to Weber, employees in a bureaucratic organisation are goal-oriented. Divisions are ordered by a hierarchical principle. Information delivery is always from top to down. All the operations in the organisation are based on rational principles. He suggests an ideal-type bureaucracy which highlights some characteristics of bureaucracy, such as hierarchy, impersonality, explicit operation rules, division of labour and a clear promotion system. Efficiency is the main purpose of bureaucracy. Post-Weberian scholars such as Crozier (1964:193-194) focuse on

varied issues that include vicious circles, bounded rationality limits, or the expansion of societal standards. The word 'bureaucracy' denotes an organisation with division of labour, hierarchies of authority and formal rules for decision-making. This phenomenon also has a certain influence on an individual's motivation to learn and opportunities for knowledge creation. Influence, under the conditions of bureaucracy, depends on interactions between the individual and the characteristics of the organisation.

To deal with the characteristics of the TPG, I will borrow some scholars' descriptions of bureaucratic organisations as a structure to frame the TPG situation. I shall also discuss some features which are important in the TPG – such as the national examination system – but which do not usually appear in discussions of bureaucratic organisations. I do not mean that the TPG fits any one existing definition of bureaucracy. Actually, the TPG may have its own bureaucratic style. My reason for using the features of bureaucracy is that it gives a classification to describe a certain type of organisation. The features may offer a structure for mapping out a concept of its operation.

5.2.1 The National Examination System

The qualification needed to become a permanent public servant can be viewed, in my opinion, as the first checking point that distinguishes insiders from outsiders. In the concept of CoPs, people are also identified as those in the core and those in the periphery (Brown and Duguid 1998:90-111). By way of learning necessary skills and getting involved in the activities of the organisations, people move slowly from the periphery into the community. The focus of discussing the qualification here is not on

the phenomena of social class, which derive from the process of distinguishing, but on how and why knowledge is shared under these circumstances.

In the TPG, passing the national examination is what people normally do to achieve the qualification. In the TPG, the national examination can be viewed as a mechanism by which capable people are qualified. This is a sort of legal identification which distinguishes public servants from general citizens. This legal identification also provides the function of a filter by which people with certain characteristics have been selected (Mr. V). Within the environment, because people have similar backgrounds, they may be able to communicate with each other well. Knowledge in these circumstances can also be disseminated quickly so as to accelerate learning activities. The organisation uses the examination as a tool to select employees, to rank responsibilities, to distribute authority, and to show public servants' career paths. Functions such as the above are important for the employees in the organisation, because the examination system determines who they are, what they should do and where they may go.

5.2.1.1 People with Similar Backgrounds Are Selected

All of the interviewees who were recruited by the pilot study of this research had qualified by national examination. 4 out of 10 of them (Mr. C, Ms. B, Ms. C, Ms. D) agreed that an examination was a fair way to select people. Three of the four were female and they had worked in the TPG for two, nine and eighteen years. Ms. B said, '*Examination was, inevitably, one of the ways to choose people, when when there are so many applicants*'. The national examination for recruiting public servants is, therefore, a criterion to select employees and to determine the qualification of those people. However, since the examination is uniform across the country (although people

are different), people with similar backgrounds are likely to be selected. According to Mr. C, '*The examination guarantees the quality of communication*', because it has collected those people with similar expertise, similar ambition and similar thinking.

5.2.1.2 Members Have Similar Thinking Models

Some evidence shows that the recruited people have similar backgrounds and therefore have comparable thinking models. We speak of the selection process as "an examination", but it takes seven different forms, such as a written test; oral test; evaluation of the candidate's publications, thesis or inventions, and so on (Zhao 1999:105). However, the written test is the most usual route. People who are good at paper work may have more opportunities to be selected. Mr. H, Mr. U and Ms. I, who are supervisors, suggested that people who were qualified by the national examination have a certain shared background which enabled them to master the official documents well. Since they have similar personalities and analogous backgrounds in terms of professional knowledge, they can easily become familiar with the system and can communicate with one another well.

Looking on the bright side, knowledge can be shared very well because of members' common language and practice. However, the common ground may be so strong that new ideas are excluded. Ferguson (1999:9-14) suggests that in order to reinforce the organisational culture an open and free flow of shared information is necessary. A flexible organisational structure should change its nature and tempo through fast dissemination of knowledge and develop its information sharing system so that different ideas, including heterodoxies, hazards or warning signals, can be considered within the system. Graham, Osgood and Karren (1998:34-38) highlight the way communities of practice avoid the dangers of immobility by following the process of

"legitimating peripheral participation", a process which admits new ideas while enabling the individuals in periphery to gain the acceptance of the community.

5.2.2 Division of Labour

According to Brown and Duguid (1998:90-111), the process of legitimating peripheral participation in a community of practice lays emphasis on newcomers gradually being involved in common practices. Through the process, individuals will identify what roles they should play and what things they ought to do in the community. For the TPG, these matters are in relation to the division of labour in the system. Division of labour describes the situation in which each position in the system is fixed by laws or regulations and each position has its special function in order to enable the organisation to become a functional system as a whole. According to Kock, McQueen and Corner (1997:78), '*Functional diversification occurs in organisations because different types of expertise are necessary to execute distinct activities in processes, which lead to knowledge specialization*'. It is hard to say how much influence this sort of system will have on people's interactions. However, the division of labour in the TPG forms a particular culture of distributing tasks and also enables supervisors to develop a particular way of supervising people.

In the TPG, division of labour also implies a situation of functional specialization. Within this context, Ms. H suggested that '*people in each position respect those in other positions, turning their tasks over to them and stepping back with the attitude of trust, rather than trying to take them through the process under escort*'. The degree of division of labour depends on how much responsibility the department should take, and the structure of the department is designed by the regulations. (Mr. T)

Such a system permits the interactions between departments and interpersonal relationships to proceed in a definitely regulated manner. Since the regulation has determined the number of employees in the department, the supervisor has only a certain amount of human resource with which to complete the tasks given to him. For instance, Mr. H suggested *'Because each position has been given its responsibilities already, it is difficult for you, a supervisor, to give employees extra tasks'*. In this situation, supervisors' charisma seems to become important. Some supervisors, such as Mr. J or Mr. U, believed that supervisors' leadership was still very helpful in getting the job done. Mr. J said, *'It may be only the leadership which can change the situation'*.

Responsibilities and work loading are given to the employees in the TPG by the regulations and supervisors. It may be just like what Mr. U referred to as a *'flexible mechanism'* that supervisors' leadership plays an important part in modulating the system. It is probably true that no system can work by itself without the help of leadership, yet it is also possible that both supervisors' and employees' behaviours are bonded by the system. In terms of working motivation, employees in the TPG have been assigned to certain positions to undertake certain tasks so that their duties are clear and exact. The exact and clear duties imply that taking excess responsibilities is redundant. People who take on extra tasks actually do the supervisor a favour. Mr. H admitted that it was difficult for him to ask employees to take on extra work. He said that he had to use personal relationships to ask for their help (This will be discussed in Chapter 7 and Chapter 8). Since the regulations have given a clear duty to each position and the employee in the position needs not worry too much about unemployment, the individual's desire to take on extra work may become weak. Some interviewees, such as Mr. I, Mr. H and Ms. J, pointed out that most people in their

organisations would like to execute only the tasks that have been assigned to them by supervisors.

On the other hand, a positive aspect of the division of labour can be found in the TPG. Ms. I suggested that employees may gain more notice from supervisors if they could help more. '*The better reputation you have, the more opportunities for promotion you may take*' she said. Because the division of labour ensures that responsibilities in the organisation are distributed, it may be easy for an employee to show his or her competence to attract supervisors' notice. 12 out of 42 interviewees echoed this opinion and some of them, such as Ms. H, Mr. U and Mr. H, mentioned their experiences of being promoted because of their enthusiastically doing extra tasks. Some departments in the government try to avoid disadvantages of the division of labour. For example, Mr. W suggested that self-expectation drove the employees in the department to form a good tradition to help one another. He built a common practice that colleagues get together to face official business. Mr. N in Mr. W's group pointed out that most colleagues were happy to help others. Even if an individual was absent from work, other colleagues were happy to take on the person's tasks.

Accordingly, the situation of the division of labour implies nothing about positive or negative judgement. It may be true that the environment has influences on individuals' or supervisors' behaviours. However, it is also possible that individuals' or supervisors' performances affect the organisational practices so as to develop a different style of division of labour. In relation to the concept of CoPs, the purpose for forming a community of practice is to develop and disseminate knowledge relevant to the participants. Within the context, a veteran shares his or her experiences with newcomers. This situation seems to reflect, in the TPG, people's helping each other

and supervisors' giving a hand to novices. In this situation, although the system may be fixed by division of labour, it seems able to be revivified through members' participation and interactions.

Even though the system is regulated by the law and rules, people's attitude to tasks (this will be discussed in chapter 8) determines the development of the bureaucratic structure. The division of labour is not necessarily inimical to the exchange and refinement of ideas. Some people establish interpersonal networks, make comparisons, pursue group identity and engage in exchanges, in order to identify their purpose in life. Following after the process of obtaining goals, new understanding is constructed. These topics are going to be discussed in Chapter 6 and Chapter 7.

5.2.3 Hierarchies of Authority

"*The greater the hierarchy, the greater the bureaucracy.*" (Zagat 1994:80). The hierarchy of authority indicates a firmly ordered system which enables the lower offices to be supervised by the higher ones. Pugh, et. al (1969:91-114) believe that government organisations tend to have authority from top to bottom. This "top-down" model has some influence on the public sector. For instance, Richard and Roger (1993:1319-1330) think that hierarchy affects the power distribution in an organisation and makes responsibility meaningful only to certain levels of the staff, so that members' participation is influenced. Because of the "top-down" method, people in lower levels may think that they are less important than those in higher levels and so have little motivation to participate in organisational activities. According to Michael (2001:16-22), "bottom-up" communities create more opportunities for breeding trust and for members' participation in activities than "top-down" ones do. Why does the

"bottom-up" model bring more trust, while the "top-down" method ruins members' involvement?

The focus of the above question is not on which model or method is suitable for a government organisation, but on what influences of hierarchy on different power distributions will be formed in the organisation. While power is distributed, its influence follows after. Whatever the model, "bottom-up" or "top-down", the influence of power is always there and affects the hierarchies of authority. When the "bottom-up" model is adopted, a shared vision will be constructed by the agreement of the majority. The shared vision becomes a power which directs members' efforts in particular ways (Senge 1990:209). In this situation, the hierarchy of authority plays the role of a facilitator which provides the majority with help to fulfil the common visions. However, when the "top-down" model is applied, organisational goals are given by the hierarchical system. Because employees do not necessarily agree with those goals, it is less possible to motivate them. In order to achieve the organisational purposes, the system sets varied mechanisms of management to strengthen hierarchies of authority. Using the power from formal hierarchy, they try to force or to persuade employees to go in certain directions. These two models suggest that hierarchy can be a symbol of power, a source of power and a limitation of power. Power in an organisation has varied ways to present itself and various chances to develop. What, then, does power mean in a bureaucratic hierarchy?

Warwick (1975) argues that the public sectors are likely to have serious hierarchy and control. Legal and political pressures make the government organisation rigid in terms of management and rule. Most organisations, such as the public sector, have their organisational purposes so that the power in them is well distributed in order to

achieve those aims. In other words, the hierarchy in these organisations is artificially made rather than naturally formed. In order to run a big bureaucratic organisation, serious hierarchy and rigid control are imposed on the system. On the other hand, because the artificial hierarchy cuts the whole system into pieces and members do not necessarily agree with the formal chain of command, this sort of power distribution may discourage individual responsibility and initiative. (Beetham 1993:13)

In practice, it is not necessary that the system only be run by the hierarchy of authority. Some interviewees, such as Ms. G, had been in the duty level of the DAR and had taken on responsibility similar to the level of the RAR one. She said, *'I was the only qualified employee in the department at that moment. I was a novice, so I could not say no'. 'It was strange that I was a qualified official, yet there were fellow workers who were unofficial. It seemed that I was their subordinate at that moment'*. Ms. G's case was interesting, because it suggested that power in the situation was not from the hierarchy of authority but from knowledge and interpersonal relationships.

Since she was a qualified public servant, she had theoretical knowledge of dealing with public service. However, when she got into the department, she knew nothing about the environment, so other workers were more dominant than her even though they were in theory her subordinates. In that situation, she admitted that she suffered from her lack of knowledge (she had no knowledge about the environment). Gradually, she found that it was not because their professional qualifications were better than hers but because they had been there longer than she had. It is not always true that a person who stays in an organisation longer is more powerful than those who stay for a shorter time. It is the environment that enhances the intensity of this situation.

Since public service was viewed as a permanent career, a large number of people wanted to get into it. Some people can still find positions inside the public service but outside the established public service career structure. This is a useful way to get a foothold within the system. These ancillary positions are not just for the unqualified but are sometimes created to recruit people who have specialist knowledge in certain fields. In Ms. G's case, the people she mentioned were those in basic positions. She said, '*There were very few unofficial positions so the competition might be more serious than for qualified positions. Some people who had close relationships with politicians might be recruited. Don't look down on those fellow workers. Most of them have strong backing*'. (Ms. G)

Although these people might enter the TPG by way of their strong backing, this could not explain why their power was so strong that the authorities of hierarchy were affected. Ms. G explained the situation thus: '*They stayed there longer and also built up good relationships with colleagues. It seemed that they were respectable elders in the department. You know that " to honour the aged and the wise" is a tradition in the society. To be honest, they did nothing to earn respect*'. Ms. G pointed out the influence of interpersonal relationships on the organisation. Because division of labour has segmented the function of the department into many positions, each position takes on simple responsibilities. A novice can often gain the necessary skills through asking others. It means that if the individual has good interpersonal relationships, he or she cannot only learn the required professional skills easily but also quickly become acquainted with the environment. This is evidence that interpersonal relationships help individual learning. It is also an example of the power of relationships sometimes being stronger than the formal hierarchy of authority. The operation of the organisation is apparently ordered by the regulations. However, the interactions within the

environment are not necessarily based on the spirit of impersonality, but on interpersonal relationships.

For general public servants in the TPG, since the content of their work is not complicated, the skill demand is not highly professional. Establishing good interpersonal networks may be more important than having professional skill. Once interpersonal networks are well established, the resources of professional knowledge may follow. Because knowing where to find knowledge is more difficult to understand than the knowledge in itself, people may put emphasis on building networks to seek resources rather than on comprehending the information. This situation also affects the forming of power in the organisation. Qualified knowledge is not necessarily useful knowledge. People will gradually identify useful knowledge if they stay in the organisation longer. That useful knowledge does not entirely indicate one's professional knowledge of dealing with tasks. People who have deep professional knowledge are not necessarily powerful. People who know how to gain the required knowledge are more influential.

In communities of practice, people pay attention to sharpening their knowledge, and their interpersonal networks are used to expand their searching for information. In a bureaucratic organisation such as the TPG, the purpose of their getting together includes multiple functions, and acquiring knowledge is only one of the functions. It is normal that gaining knowledge is for the purpose of improving tasks. Although the purposes of a community of practice and a bureaucratic organisation are different, their members learn something incidentally through their participating in interactions. Additionally, because building interpersonal networks in order to find solutions has been overemphasized in both the concept of CoPs and the TPG, individuals' learning

within these circumstances may be directed to delivering knowledge rather than creating knowledge. This issue is related to the interactions between interpersonal networks and exchanges, and also includes the concepts of power and the market. In Chapter 7, this issue will be discussed in detail.

5.2.4 Documentary System and Organisational Routines

Since public affairs increase day by day, suggested solutions for dealing with these matters are abundant. In the TPG, these solutions have been documented in written or electronic forms (Mr. J). Because of the documentary system, the organisation can deal with things in a transparent and objective way. Nowadays, this system may be viewed, from the angle of knowledge management, as a mechanism for storing knowledge. However, the original idea for making this system, in terms of bureaucracy, is to clarify the responsibilities within the organisation (Ms. I). It seems that making the operation clear and rational is extremely important to the public service.

In terms of knowledge management, Teare and Dealtry (1998:55) highlight the importance of a "Learning Log", which enables individuals to record daily interactions in their diaries. Some scholars, such as Kleiner and Roth (1997), suggest using learning history, which means recording some important events in order to help organisational learning. To compose the history, experts use a double-column table to describe and analyse the event. In the right hand column, interviewees who experienced the event describe their experiences. Some comments or analysis by learning historians can be found in the left hand column. The learning history is not just a record of the past, but a knowledge base for coping with similar difficulties in the future. For example, a division that has a successful history of creating a new product can trace the history to discover the cause of its success, to use when the

organisation would like to develop a new product again. Using the history, the leader of the division will ask members to review the history and underline the parts which excited, confused or attracted them. They can then discuss in depth the reasons for success. This method is to apply 'community storytelling' to convey knowledge and the purpose of doing this is to establish an organisational routine which is ready to sort out problems.

In the TPG, the documentary system is similar to the function of "learning history", which is a key for accelerating individual learning. 20 interviewees out of 42 ranked the archive study as the most important way to gain the necessary skills when they were newcomers in the organisation. 7 of the interviewees thought that asking for help was the fastest way. Another 4 interviewees suggested that studying regulations was fast. 3 of them used observation to adjust themselves to the new environment. 8 of the interviewees thought that the three methods were equal in importance.

The documentary system can also be viewed as the foundation for producing organisational rules by which organisational routines are formed. Since most novices in the TPG rely on the documentary system to learn the range of their responsibilities, to understand the basic operation of the department and to get a key in order to deal with difficulties, the documentary system becomes a base of organisational routines. Ms. F thought that it was not difficult for a novice to discover how to perform his or her tasks in the public sector, because the archive recorded the details of previous decisions. In her experience, she usually followed her predecessors' ways of dealing with her daily work. It seemed to her that the content of her work was not very varied, so she could deal with it in a programmed way. Ms. Q suggested that she could gain some hints for dealing with things through archive study but she could not totally

follow their methods because her tasks were constantly changing. In her situation, her work was not difficult but challenging. This is probably because she had not been in the organisation long and her tasks were always unique, she thought the fastest way to gain the know-how in the public sector was to ask experienced colleagues. Thus it can be seen that studying archives is neither the only way nor the quickest way to deal with tasks.

Situations such as the above seem to indicate that the documentary system is helpful, especially when people deal with regular tasks and it is less useful when a complicated task is assigned. Storing useful information in the community in order to respond more rapidly to members' needs and inquires is also one of the functions of communities of practice. According to Lesser and Storck (2001:837), '*from a connection perspective, communities can help individuals rapidly identify an individual with the subject matter expertise necessary to provide the best answer to a client problem*'. This situation reflect Ms. Q's experience, in that she seemed to have her personal resource library to which she could throw questions and from which she could get answers back. I do not think that Ms. Q's personal networks can be viewed as a community of practice: it would be true to call them a base on which a community of practice might be developed. This would happen if, following the model proposed by Stuckey (2001), members actively collaborated with, taught and mentored each other.

5.2.5 Organisational Routines

The concept of 'routine' refers to a set of regular and predictable patterns which is similar to a counterpart of one's behaviour (Nelson and Winter 1982) and also directs members' behaviour within an organisation. From this view of individual and organisational learning, routine is like a sort of practice which revises the learnt

experiences and strengthens the established knowledge structure. According to Madhavan and Grover (1996:1-12), tacit knowledge that is unique and difficult to imitate is embedded in complex organisational routines and developed from experience. Banerjee (1998:147-164) used Kodak's CEO as an example to explain how the routines in an organisation are transmitted to individuals through socialisation, education, imitation, professionalisation, personnel movement, mergers and acquisitions. Bartlett and Ghoshal (1998:34-39) believe that routinely diffusing expertise and transferring practices is the only way to link isolated expertise and fragmented knowledge in an organisation.

In order to deal with scattered knowledge in an organisation, some scholars suggest that it is necessary to establish a mechanism to integrate knowledge into organisational routines. Winter (1991:179-195) assumes that routine is a mechanism which is for storing knowledge, and so becomes a foundation of organisational behaviour. Tiwana and Bush (2001:246-247) propose three levels, which are the physical level, the logical level and the presentation level to contribute individuals' knowledge to group processes. These scholars view the alteration of an organisational routine as an indicator that shows the knowledge situation in the organisation.

In this study, Mr. J's group is the only organisation among the three groups (the three cases will be discussed in the next chapter), which formally establishes a mechanism to deal with organisational knowledge. In the group, Mr. J asks employees to note down important issues which happen everyday so that they can discuss these issues within an informal meeting once a week. He also creates some chances for communicating with colleagues in order to collect members' ideas and to identify some problems of the

organisation. These ideas and problems accompanied by members' daily notes will, in the end, go to an informal meeting.

As regards the informal meeting, some tasks need to be done during the meeting. First of all, all members get together to discuss problems that have happened during the week. Then they make sure whether or not the problems have already been sorted out. For the resolved problems, they will discuss them together to see whether or not the issue is important enough and the process of dealing with the issue is worth being kept in the organisation. If they think the issue is worth recording, Mr. J will ask a specialist to help to record the experience. The results of the recording will be summarised as a formal plan so that employees have a norm to follow to cope with similar difficulties that may happen in the future. Mr. J suggested that the individual could learn something from these discussions and through the process of sorting out problems. In this situation, the results of these discussions produce new routines so as to affect both individual and organisational learning.

In communities of practice, learning activities are promoted by way of establishing relationships and of sorting out problems together (Roger 2000:385). Knowledge is, in these circumstances, stored in particular members, and there are 'content managers' or teams in the community to keep the repository fresh. The teams or managers are organisers and facilitators who not only try to contact idea providers but also to improve interactions in relation to particular problems (Lesser and Storck 2001:838). Storing knowledge in particular individuals is a way by which explicit and tacit knowledge can be delivered together.

5.2.5.1 Routines Exclude Knowledge Creation

Some scholars, such as Katz (1982:81-104), think that not all routines are of benefit to knowledge management or to organisational learning. Hackman (1990:65-97) suggests that an organisation with a very routine situation may deliver its knowledge fast, yet it can, on the other hand, misunderstand some situations in familiar ways and also miss the chances for innovation. Guzzo and Dickson (1996:333) echo this concept, and believe that a team with no change will lead to stultification and entropy. When the individual is facing a new stimulus, organisational routines will suggest a programmed solution or certain logic by which to respond. This situation, in a way, deprives the individual of his or her opportunities for learning, discourages new observation and leads to mental inertia and complacency. Kelly and Amburgey (1991:591-612) suggest that if a company can develop some routines for making changes, the organisation will have more capability of coping with changes.

Bhatt (2000:94) suggests that '*organisation is based on the temporality of knowledge which continually needs to be renewed*'. If people in an organisation rely excessively on established ways of sorting out problems, they are less likely to recognize the challenge of new ideas and make creative use of the conflict between old and new concepts. Because people may be getting weaker at detecting new challenges, there are few opportunities for driving conflicts between new and old knowledge so the chances for learning are limited. When people are getting stronger at relying on particular ways to sort out problems, new observations have no chance to be compared with the individual's established knowledge in order to trigger learning. For example, Mr. A admitted that employees in the public sector have few opportunities to interact with new stimuli, so innovation in the organisation is rarer than in private companies. Mr. A did not associate learning with innovation directly. In his opinion, learning is too

vague a term to make sense. However, he did believe that new ideas mostly derive from making comparisons. Because the environment embraces too many routines, Mr. A agreed that public servants have few chances to make comparisons to create new horizons.

5.2.5.2 Routines Facilitate Knowledge Creation

When an organisational routine is well developed, employees need not pay much attention to dealing with tasks because some stimuli that derive from the tasks have been responded to by programmed solutions. This situation implies, in a way, that space for thinking is provided. In addition, when the space is offered, the individual is still dealing with the tasks. The purpose of completing the tasks is always there, even if he or she is using routines, the programmed solutions, to sort out the problems. Since there is a purpose in the individual's mind and the environment, at the same time, provides space for the individual to reflect, it is very possible to trigger the person's motivation to learn. However, it is also possible that the individual uses the space to think about something which is connected his or her own personal business but unconnected with the tasks.

Ms. N said, *'When the supervisor gives you a new task, you can only follow the process you have done before because these tasks are just regular routines and in addition you are too busy to think'*. Ms. N presented her daily life surrounded by routines and this mirrors what Jarvis (2001:16) refers to as "Non-consideration". Because of the routines, the organisation has developed several programmed solutions to deal with regular tasks and to cope with certain difficulties.

Although routines may also sort out most of the problems, the solutions are not necessarily the best ones. In addition, since situations are always different and changing, the routines cannot fit all the situations. Aronson (1999:157) suggests that the failure to update one's concept of the world can result in a mistaken picture of reality so a poor decision will be made. When an individual is involved in a routine, can he or she get rid of the disadvantage? According to Ms. N, '*Even though I had no time to think what I had done, I found something interesting from time to time, especially when I was free to recall some situations. Because of the recalling, some insights into how to sort out the problem more efficiently emerged in my mind*'. Accordingly, it seems to Ms. N that organisational routines do not hinder her learning, but offer a chance for rethinking so as to find a better way for performance. Ms. R, in the same department, echoed Ms. N's opinion and said, '*Because tasks are regular, my brain can then take a rest and so rethink the whole process*'.

The above cases indicate that organisational routines provide a chance for "rethinking". According to Holmqvist (1999:435), '*By reflecting on habitual behaviour, individuals can become aware of underlying knowledge that guides behaviour*'. The action of rethinking may be one of the processes of learning, but it is even more important that the process of rethinking can help the individual to find something different so as to trigger a learning process. And if people can learn something, it is not because the results of searching for differences can provoke the individual to learn, but because some differences that attract the individual's notice may lead him or her to make comparisons so as to create new understandings.

The concept of routine is not specially highlighted in the discussions of communities of practice. However, organisational routines are products of organisational operations.

Different routines represent different shared practices. In communities of practice, the concept of 'legitimate peripheral participation' is crucial. When newcomers gradually become familiar with those peripheral practices, they are increasingly accepted by the group (Fox 2000:855). For the members in a community of practice, they '*build up repertoires of discrete competences*' (Fox 2000:856) first, and then try to integrate these diversities into their knowledge systems. The function of organisational routines is, in my opinion, similar to that of peripheral practices. When individuals in the TPG practise routines well, they can perform tasks with an acceptable quality. However, for this study, I try to go beyond this. Organisational routines, which reflect individuals' life in the organisation, also create common ground for members' interactions. Using the common ground, people gain group acceptance, make comparisons with others, establish networks and engage in exchanges. These ideas will be discussed further in Chapter 7 and Chapter 8.

5.3 A Summary of Chapter 4 and Chapter 5: An Overview of the TPG

The culture of Zen-chin and the bureaucratic features of the TPG intertwine with each other so as to enable people in the environment to develop their particular forms of interaction. In this situation, the individual, the leadership style and the system interact with each other, and it is difficult to find the origin from which the ongoing cycle is triggered. However, it is possible to give an overview of how this interaction works in the TPG.

5.3.1 The Individual

First of all, from the angle of the individual, people tend, according to the hypothetical assumption of Economics, to seek the benefit of higher utility with lower cost. So, people may not seek to enrich or to broaden the scope of their work without particular

inducements, when their work is simple and easy. In other words, people may love to go easy and hate to work hard, if they are allowed the choice. The tradition of the TPG has been to do everything by regulations or - if the regulations do not cover a particular case – by consulting colleagues and following precedents. As a result, people in the system know clearly that certain behaviours may lead to certain results. Because the system is too fixed and supervisors' powers are limited by the system, most management functions, such as giving rewards and penalties, have been taken over by regulations. Because the discipline is too loose, employees have no motivation to participate in organisational activities. People can go the easy way without worrying about being disciplined. Paradoxically, although employees know they are unlikely to be disciplined, they also know that their work is governed by many regulations and that if they make a mistake they are liable to be blamed. But the result, unfortunately, is not to motivate them to higher standards of work. Instead, they often prefer to avoid difficult tasks and stick to those where they are unlikely to make embarrassing mistakes.

According to Mr. U, there were those in the TPG who loved to go easy and hated to work hard. They were inclined to engage in uncomplicated tasks. However, the inclination of loving to go easy and hating to work hard may affect other people in the group, because people in the group tend to compare themselves with similar others (This topic will be discussed in Chapter 7.) If no one wants to take on complicated tasks, the difficult tasks may then be separated into many simple ones to be assigned to each worker. Because no one wants to take on extra duties, new employees will be recruited, so the organisation gets bigger and the division of labour becomes more common.

5.3.2 The Organisation

From the angle of the organisation, the development of the division of labour creates for the organisation several routines so as to produce its particular interaction styles. Accumulating abundant experiences, the system has developed several ready-made solutions which are available for employees to use. Although a novice is allowed to find his or her own ways to cope with problems, he or she is highly recommended to go for the traditional way. He or she may start by studying some rules and handbooks to become familiar with where he or she is, reading instructions to find out what he or she should do, and reviewing archives to discover what she or he can do. Generally speaking, most new employees in the public sector will mimic the practices of their predecessors in dealing with tasks. In the very first stage of a public servant's career, it is inadvisable to have a go at tasks using his or her personal methods, because it always leads to negative results. The accumulated experience of the organisation in dealing with tasks drives newcomers to follow the methods adopted before. This is also a way for an organisation to model employees' behaviour. This situation, therefore, has formed an unbreakable routine in the public sector in Taiwan. This fixed routine impacts upon an individual's professional behaviour, and also leads members in the group to think on similar lines.

The similar thinking may be of benefit in forming an organisational culture and may also strengthen the culture day after day, because the employees within the organisation share assumptions, beliefs, values and norms, actions as well as routines and language patterns. Forming a culture means that certain actions will be done as a matter of course. People in the organisation will follow the rule without any thinking. By continued manipulation of the "common ground", the organisational routines can be strengthened gradually.

Organisational routines are similar to individuals' learning patterns in that they affect knowledge creation in both positive and negative ways. Routines derive from habitual practices that are acknowledged by the majority of the organisation. Because of the repetitive performances, the resolutions to particular problems are embedded in members' minds. From the angle of knowledge sharing, routines provide members with shared language and practices so that explicit and tacit meanings can be circulated efficiently within the group. From the angle of knowledge creation, an organisation may rely on its routines too much to ignore the critical contribution from the peripheral parts of the organisation. The interaction between Zen-chin and the system provides employees with a simple environment for working and liberal circumstances for learning. The adherence to routine creates common ground for efficient communication, yet it hinders possibilities of change and innovation.

5.3.3 The Leadership Style

If we agree that the particular culture in the TPG derives from interactions between the individual, the system and the leadership styles in the environment, a supervisor's role in the TPG cannot be forgotten in this discussion. Because public servants' working conditions in Taiwan are controlled more by the law and less by supervisors (compared to managers' power in the private sector), the role of a manager is relatively ignored. Supervisors are, within this circumstance, less able to carry out their facilitating and merging functions (merging employees' knowledge into the organisational culture and helping employees to acquire knowledge from organisational routines). Managers in the public sector prefer to assign employees simple tasks, because they cannot guarantee the quality of employees' work or discipline the workers' behaviour.

We cannot deny that it is still possible to encourage employees to widen their expertise through some management skills, for example, job rotation. Job rotation is also a good method to equalise members' work in quantity and to share their responsibilities in quality. Nevertheless, employees who are affected by the particular bureaucratic style seem to be not very interested in the specialities and skills of other people in the same organisation (this has been discussed in Chapter 4). This situation makes individuals' learning motivation and their results of interacting with knowledge activities unpredictable. The knowledge activity means that people may acquire knowledge through interacting formally or informally with colleagues or their official business. If the indifferent attitude pervades the entire department, the manager is eventually forced to undertake an excessive load of tasks and most of the responsibilities. People may not be interested in learning professional knowledge, but pay attention to acquiring other topics of knowledge, such as interpersonal networks. (This will be discussed in Chapter 7 and Chapter 8) Because of employees' indifferent attitude to tasks, many managers prefer to maintain employees' work in simple but professional styles rather than train them to become workers with multi-capabilities.

5.3.4 Learning in an Inefficient System

Reasoning such as the above seems to echo a public Taiwanese image of the government system: that they are an inefficient team. Nevertheless, many interviewees (25 out of 42) did not totally agree with the general image. It seemed that they understood why the public viewed them as an inefficient team, yet they tried to justify their performances. However, being named as an inefficient team is one thing; whether or not they learn things within the environment is another. Their learning is not necessarily related to their performances of tasks, and the knowledge that they acquire through interactions is not necessarily associated with professional topics.

It seems to me that this situation echoes the original idea of communities of practice. Some communities of practice are formed without any prior intention by the members to acquire other people's knowledge. They get together for the purpose of taking a rest or having fun. Because of members' similar background and problems, they have common topics to discuss. Because of different degrees of understanding, people can broaden their horizons by way of sharing experiences. The critical point for this sort of community is that they do not focus on certain skills or knowledge and they do not impose the stress of exchanging knowledge on members. Because of the relaxed atmosphere, participants do not mind revealing themselves to other members. This liberal learning environment is, in my opinion, similar to that in the TPG.

Although Zen-chin may hinder some management functions so that the bureaucratic organisation cannot bring its operations into full play, some supervisors or team leaders modify their management styles in order to change this situation into a positive one. In addition, it is not inevitable that people's self-expectation will be limited by the lethargic environment. In some cases, which I am going to show in the following chapters, the group energy which is manifested in interactions seems to be nourished and activated by one's desire to be accepted by the group, make comparisons, establish networks and engage in exchanges.

Chapter 6

Three Cases

In previous chapters, some characteristics of the TPG have been described so as to give a picture of people's life within this particular environment. Based on this picture, people's interactions with the culture, the system and the leadership may then offer a ground for understanding how the environment fosters the development of group dynamics.

According to the concept of communities of practice, people create knowledge through sharing information (Lathlean and May 2002:395). The knowledge which they create does not merely refer to the professional skills which are developed by their interactions with other knowledge resources. The knowledge also includes one's experiences of being involved in the processes of sharing insights and developing understandings. Through the process of participation, the individual reveals his or her own meaning of the world. In order to illuminate the relations between one's participation and one's learning process within a community, Wenger (1998a:73-87) proposes three keys to the concept of CoPs: *mutual engagement, shared repertoire, and joint enterprise*. The most interesting issue which derives from the concept is that it seems to present a linkage between associated knowledge processes and the environment in which the individual is. (This has been discussed in Chapter 5). In order to highlight the relationship between learning and knowledge, I will focus, in this chapter, on three groups that demonstrate different styles of group dynamics.

The reason for doing this is to understand how people in the TPG are affected by the influences of group dynamics. Although the TPG seemed to be depicted, according to the previous chapter, as an inactive system (I use the term 'inactive' after Mr. L's

expression 'slothful and inactive', in order to highlight that people in the environment are not easy to be motivated), the following paragraphs will show, through three cases, how people acquire their knowledge during their daily life in this particular environment. People's interactions can be a turning point which may lever some unsatisfactory situations into position even though the degree of the influence has not been established in this study.

Each organisation has its unique characteristics which enable it to develop particular ways of operating. The influences of group dynamics on the people in the TPG may be different from those in other organisations. Even if people are in the same organisation, their performances are varied because of different group influences. I intend now to discuss in detail the three cases to explore the relationship between the individuals, the interactions and the system. This should give us a base against which similar interactions in other contexts can be compared. I do not intend to identify the three cases which I am going to introduce as particular types of organisation, even though some of the members in the group did use terms such as "learning organisation" or "team" to name the groups. However, it is true that each group seems to represent a particular type of interaction. For his organisation, Mr. J designed mechanisms to deal with the knowledge derived from interactions, and he identified the organisation as a "Learning organisation". Mr. W adopted the term "team" to describe his department, while Ms. M also used this term to illustrate the interactions within the office where she worked. In my view, Ms. M's interactions with her colleagues were similar to those within a loose community of practice. Accordingly, the three cases seem to represent diverse types of current organisations, which have different features but, at the same time, share something in common. The findings may reflect the concept of CoPs and also to point the way to some particular dimensions worthy of further study.

In order to link the cases and highlight some important features of each case, I demonstrate the cases by way of making comparisons. Thus, the next case is introduced through making a comparison with the previous one. This method may help us not only to understand the circumstances of each case but also to realise the interactions in each group in more dimensions.

Three interpretative cases emerge from the data, through the analysis of the different types of power implied in the extracts. In case one, I highlight a 'Common Value' in Mr. J's department; in case two, the focus is on a 'Tradition' in Mr. W's team; in case three, 'Charisma' in Ms. M's group is discovered. Each of them has a unique role to play in revealing and explaining group dynamics in the organisations so as to contribute some reflections to the concept of the communities of practice. The following sections will present the three cases, supported by extracts from the data.

In Ms. M's group, each member had a particular mission but his or her rank was the same as everyone else's. The legal supervisor seemed not very popular in the group, but Ms. M, the informal leader, was. By contrast, Mr. J's group clearly distinguishes the supervisor's position from that of subordinates, so the supervisor's power plays a major role in pushing the group to keep going. The situation in Mr. W's group seems halfway between these cases. He, the supervisor, is one of the members who is affected by the group's tradition and also keeps it going.

6.1 Case 1: Common Value / Mr. J's Learning Organisation

Mr. J's department was a personnel department, which provided employees with information or help in relation to using personnel regulations. Mr. J has been a

department head for about 20 years. He had worked in varied organisations, including private companies, but always in a personnel department. Mr. R was the one who was used as an example by Mr. J to hold up as a "hero" to other employees. Mr. L thought that he did not play a big role in the organisation, even though he was a specialist (his position was higher than that of basic employees), because he thought that Mr. J disliked him. Mr. L's best friend in the department was Mr. K, who was the first person I contacted in the department. Mr. K introduced me to Mr. L and also invited Mr. M to interviews for me. I wanted to include the views of women employees as well as those of men; unfortunately, only Ms R was available for interview. Because the organisation had a particular mechanism to integrate members' knowledge into the organisation and Mr. J also had strategies to facilitate individuals' learning, I agreed with Mr. J's opinion that the organisation was, in some ways, a learning organisation. I adopt this as a case to compare with Mr. W's team and Ms. M's informal network. People's interactions within these different types of groups may provide me with some hints, enabling me to construct my own typology of the elements essential to communities of practice. Table 6.1 shows interviewees' age, years of service and positions in Mr. J's learning organisation.

Table 6.1 : Interviewees in Mr. J's Department

Name	Age	Years of Service	Title of position	Date of interview
Mr. L	37	15	Subordinate	8 Mar 2001
Mr. M	36	12	Subordinate	8 Mar; 9 Mar 2001
Ms. R	32	9	Subordinate	9 Mar 2001
Mr. J	55	30	Supervisor	27 Mar 2001
Mr. K	33	8	Subordinate	27 Mar; 30 Mar 2001
Mr. R	42	18	Subordinate	30 Mar 2001

Mr. J is the head of the department, which is named a 'learning organisation' by others and by Mr. J himself. He uses leadership to implement the concept of the 'learning

organisation'. '*In order to create a Learning Organisation it requires establishing a culture that values the communications and relationships in the organisation and also values the individual. That requires leadership to express a new value system and a new leadership value system' (Mr. J).* Accordingly, Mr. J believes that the essential way to form an organisational culture is to rebuild the values in the organisation. He agrees that individuals are diverse. However, it may be necessary to direct individual values in order to achieve organisational purposes. He said, '*It is certain that each person has his or her own values. It is also unquestionable that the organisation can run effectively when the varied personal values are unified into a common value'*. This idea is similar to Senge's (1990:205-207) 'shared vision'.

Mr. J's way to achieve the idea is, however, totally different from Senge's. Senge suggests using conversation and dialogue, by which opinions are disseminated all over the organisation without restraint so that each member's vision will be revealed and known by others (Senge 1990:238-239). Members can then negotiate with one another openly in order to establish a shared vision. Senge's approach is obviously from bottom to top. The essential idea for doing this is to make employees feel comfortable that their visions are the same as and also part of the goals of the organisation. This is what Senge refers to as the 'hologram'. He said, '*if you divide a hologram, each part shows the whole image...when a group of people come to share a vision for an organisation, each person sees his own picture of the organisation at its best. ...as the shared vision develops, it becomes both "my vision" and "our vision".*'(Senge 1990:212). The individual might be motivated to seek the aims of the organisation, because when the aims are fulfilled the individual's vision can be achieved at the same time.

By contrast, Mr. J's method is from top to bottom. It is, in his view, extremely important to give employees an example to follow. '*At first, you have to make a hero in the organisation so that your idea can be expressed by the hero's behaviour. You can see this as a form of hero worship. You can also see this as a way to highlight and to show the evaluation criteria in your mind to others. When the criteria are routed into employees' minds, good behaviours can then have a base to be encouraged and bad ones can be punished. Gradually, members will know the rules of the game. If you follow the rules, you will be very comfortable in the organisation. If you break the rules, you will be condemned' (Mr. J).*

During the process of forming the common value, he kept disseminating up-to-date notions of management science, such as knowledge management, learning organisation, and so on. The purpose for doing so is to let employees know that the criteria which they follow are reasonable, reliable and in accordance with the current thoughts of management science. He would like to let members in the organisation know that he is not the only person to set the criteria for employees but that his ideas are consistent with mainstream management science. Mr. J said, '*Not only have I let them know what they should do, but they have also realized that what I am doing for them is the most advanced notion of management*'. Mr. J's approach is, in my opinion, similar to the method which Christianity adopts to persuade its followers.

According to my experiences of communicating with people from the Mormons and Jehovah's witnesses, the essential point for Christianity is not to argue where the god is from or why the god is omnipotent, but to make followers believe that the god is reliable and believable. If you believe it, you are going to have eternal life. Christianity also gives many testimonies to persuade followers that if you believe you will then

have a positive feedback in the end. There is a bible to publicize the god's rules. There are also some advocates to convince the public through testifying about their own experiences. This strategy is similar to what Mr. J has done. The vital point of his technique is not to question whether or not the values are true or false, but to choose the best value, which Mr. J himself believes. In order to make employees follow the values, he applies positive and negative reinforcement to strengthen the values. In this case, Mr. J also has his bible, that is some theories of management science. The theories of management science are not created by Mr. J, but are known by the Taiwanese from the time they were in their Junior Business College.

'Because the organisational value comes from theories that are not strange to ordinary people, it can certainly establish a criterion which is relied on by all of the members' (Mr. J). In this situation, Mr. J himself also follows the principle he sets. Situations such as the above make people in the organisation believe that it is the principle that masters the organisation rather than Mr. J. Employees within the environment can foresee the results of their performances and can also master their own future, if they follow the principle.

This is just like what Mr. J said, '*They can realize clearly whether or not their works can lead to a good result, because they know the criteria. It is the employees themselves who decide and evaluate the results of the tasks. I, a head, am only a servant of the organisational value, because I can change nothing if you have followed the value. So it is you who examine your own work. It is also you who score your own annual appraisal. You will know the result and you can also master your future by yourself. I have no power at all but just follow the value like others'*. Since the theories of management science are their 'Bible', Mr. J also takes on the role of amender and

interpreter. According to Mr. J, many ideas for amending the principle derive from chatting with colleagues. When he gives some new notions to employees, he is also given some new ideas back by his colleagues.

6.1.1 Individual's behaviour is directed by the Common Value

Mr. R is one of the employees in Mr. J's department and Mr. J constantly referred to him as the 'Hero'. This was a strategy to promote high standards and learning by putting forward one worker as an example to be imitated. Mr. R did feel that his potential had been developing under the supervision of the value system. He said, '*When things are going on and on, you can detect which sort of behaviour may result in which outcomes. Just observing teaches you how to avoid a lot of mistakes. And you will automatically know an appropriate way to sort out the problems*'. This expression seems to echo Mr. J's intention of shaping the value system of his department. Mr. J also believed that the system could direct employees' behaviour, because the system formed a rule which allowed only certain qualities of the results. Mr. J did not discipline employees' performances directly, but made them discipline themselves by way of the value system (this situation will be explored in chapter 8). Since employees' behaviour has been directed by the system, it may be true that certain sorts of behaviour will be acknowledged, certain kinds of knowledge may be produced and certain ways of learning can be encouraged.

In Mr. J's case, the importance of establishing a value system has been identified. Another department, Mr. W's team, had a 'secret weapon' similar in function to the value system which governed Mr. J's group: it was tradition.

6.2 Case 2: Tradition / Mr. W's Team

Mr. W's department was responsible for personnel policies. Compared to Mr. J's department, Mr. W's department made personnel policies, while Mr. J's department implemented them. Mr. W was the head of the department, and he was introduced to me by Mr. N Mr. N accepted my invitation, because he had just earned a Master's degree and he was interested in my way of doing the research. Ms. Q and Ms. O were chosen for interview in order to provide a female perspective on the activities of the department. This case shows a supervisor actively participating in organisational activities and so affecting the style of the group dynamic. Because Mr. W and Mr. N regarded the department as a team, I adopt this case as an example of team learning to explore how the individuals learn in the team. Table 6.2 provides information about the interviewees in this department.

Table 6.2 : Interviewees in Mr. W's Department

Name	Age	Years of Service	Title of position	Date of interview
Mr. X	40	16	Subordinate	8, Mar 2001
Ms. Q	28	6	Subordinate	9, Mar 2001
Mr. W	43	20	Supervisor	21, Mar 2001
Ms. O	34	9	Subordinate	21, Mar 2001
Ms. P	44	19	Subordinate	22, Mar 2001
Mr. N	41	18	Subordinate	20, Mar 2001

Mr. W, who is now the head of a department in the TPG, describes the organisation in which he works as a team. He said, '*It is probably the tradition that makes the organisation run effectively*'. '*The tradition includes a lot of elements, which not only bind all the members together but also has the function of rewards and punishment. I don't know where the tradition is from. It is perhaps just because of employees' self-expectation*'. In his analysis, tradition has the power to unite and discipline employees.

Mr. W's description is a bit different from Mr. J's 'value system'. Mr. J's system is dominated by Mr. J himself, even though he always manipulates things from behind the scenes. Mr. W's 'tradition' cannot necessarily be controlled by the head, who is Mr. W himself. We are not sure if Mr. J's behaviour is affected by the value system which is made by himself, yet it is clear that Mr. W, who is one of the team, is also affected by the 'tradition'. In addition, Mr. J's 'value system' seems more rigid than Mr. W's 'tradition', in terms of individual performances. Within Mr. J's system, everything seems to have been settled and the system also provides several channels for knowledge sharing and creating. From the angle of knowledge management, Mr. J has also designed a sound mechanism to encourage the function of knowledge acquiring, storing, applying and recycling (this has been introduced in Chapter 5). Compared with Mr. J's deliberate design, Mr. W employed the method of participation to facilitate learning. Because he could hardly change the 'tradition', following the 'tradition' he put his heart and soul into tasks. Because he merged himself into the 'tradition', his thoughts and behaviour shared a part of the 'tradition'. Because he understood the 'tradition' and played a large role in it, he had opportunities to influence it.

The influence of Mr. W's 'tradition' on an individual's attitudes has been proved by Mr. N, an employee in the organisation. He described the situation when one of the colleagues was absent and another one took on the absentee's duty. Mr. N said, *'The deputy would think: it is not often that I have a chance to help you. You need my help now. Your work is surely a top priority'*. Mr. N's description provided a clue to tracing the relationship between the 'tradition' and his personal value system. It seemed to him that the tradition suggested cooperative interactions with highly moral qualities. The reason for my suggestion of the 'highly moral qualities' is that their cooperation is not

based on measurable exchanges, such as doing things for the purpose of getting the other one's feedback in return. Mr. N's description also shows that he quite enjoyed helping his colleagues. However, the 'tradition' does not always work by way of encouragement, but sometimes by way of punishment. According to Mr. W, *' If all the members in the team work hard with an energetic attitude, the atmosphere will expel the one who tries to lie down on the job. Because other conscientious employees will point the finger at the truant one, lazy people will be uncomfortable within the situation'.*

The effect of this 'tradition' seems similar to Mr. J's 'value system'. Neither situation requires supervisors to use management tools to punish lazy workers (I use the word 'lazy' after Mr. W). The rules have been formed in each member's mind. When an employee does something wrong or bad, it also means that this kind of behaviour is not compatible with other employees' criteria. Therefore, it is the power derived from the group which disciplines each employee. Mr. W named this the power of the public voice. He said, '*Within this environment, if you are the person who always fusses about your work-load or always does something different from others, you will be corrected by others. Because your behaviour will affect the reputation of the department, the invisible power will spontaneously trigger the power of the public voice to condemn the behaviour'.*

The tradition seems not only to encourage collaboration, but also really to punish uncooperative behaviour. The effect of punishment is similar to Mr. J's system. According to Mr. J, the organisational value system was commonly shared by employees so that the sluggish employee would become an outsider (Mr. J used the term "sluggish" in interviews). Since the outsider could not fit him- or herself in the

value system, he or she might feel too uncomfortable to stay in the organisation. The sluggish one would eventually leave the group by his or her own choice (Mr. J). Both Mr. J's and Mr. W's cases seem to identify the power of desiring to be accepted by the group. People who have a desire to become members of the group will try their best to fit the group's criteria. The process of gaining group acceptance means a lot in terms of learning and knowledge. Not only may people learn professional knowledge through the process, but they can also know themselves more by way of identifying the differences between themselves and others. This part will be discussed more in Chapter 7. Although there may be some common features in both of the organisations, the group dynamic situation in Mr. W's organisation is still different from that in Mr. J's group.

Mr. J's way of producing a common value was to persuade employees. He was selling his ideas and using market skills. For example, he made a 'Hero' to promote his ideas and employed the knowledge of management science as a sort of 'Bible' to strengthen colleagues' convictions. Continuing the interactions, members in the group gradually developed performance patterns and organisational routines. Criteria for interactions were also established. The criteria that derive from members' common value showed each price for each behaviour. Certain interactions would be given a high mark, while others were not allowed in the group. I did not know how great the influence of the environment on people's interaction was. However, employees' interactions under this sort of control were effective, but the atmosphere of helping others was somehow not very active. For example, Mr. M. lent a hand to his colleagues, because he expected to gain some help in the future. Mr. K. and Mr. L. helped each other because they share similar suffering under Mr. J's strict control. Mr. R was pleased to help colleagues, but he was the one whom Mr. J referred to as the 'Hero'. It seemed that the system in Mr.

J's group was well controlled, but employees' attitudes to helping each other seemed for the purpose of exchange. Social exchange is generally regarded as one of the motivations by which interpersonal networks and relations are established, and this is also a theory that may be applied to interpret most social interactions. (This point will be discussed in Chapter 7.) However, it is not certain that people will always bring this motivation to interacting with others. Unlike the atmosphere of interactions in Mr. J's group, employees in Mr. W's group were, according to Mr. W, Mr. N and Ms. O, pleased to help each other. Some types of help which were based on exchange were also found in Mr. W's group, but the atmosphere was different from that in Mr. J's case. This situation, which includes one's value system and attitude to tasks, will be discussed in Chapter 8.

Additionally, Mr. J believed that not every interaction was good for the organisation, and it needed to be well directed. In Mr. J's organisation, it was Mr. J who directed the whole system to become a 'Learning Organisation'. On the other hand, Mr. W did not clearly understand the concepts of 'learning organisation' and 'organisational learning'. In his organisation, he could not totally control the development of the 'tradition'. It seems to me that every member in the organisation could contribute something to the 'tradition' and Mr. W, the head, was only one of them.

6.2.1 Individuals' behaviours are affected by the 'Tradition'

From the angle of individual learning, Mr. W did not forcefully encourage employees to engage in learning activities. However, people's performances in his group were motivated by a sort of comparison. When Mr. N first got into the TPG, he found all the colleagues around him were energetic and enthusiastic about writing articles for a competition. The writing competition was an annual activity that was held by the TPG.

The topics of the articles were always related to public administration and public policies. Not every employee in the TPG was interested in participating in the writing competition. After Mr. W's advocacy of it, the activity was getting popular in the group. People in the group were not only enthusiastic about participating in the annual writing competition, but also tried to put their articles in journals as much as they could. Mr. N described his feelings of entering the department and of facing the challenge of writing the competition essays: '*I was surprised and nervous because I had never been in such a situation before and I was afraid that I could not become one of them*'. He also mentioned: '*I wanted to try even though I was the oldest employee in the department, because writing articles is a good thing. Not only could it improve my writing skills, which might help my work, but it also gave me a clue to really get into the organisation*'. As a result, Mr. N began to write like others in the office and produced many articles in the end.

This case does not show clearly how Mr. N learnt, yet it offers some clues for tracing the incentives for learning. At first, it seemed to Mr. N that gaining acceptance was an important key to triggering his learning. Because he was a new-comer at that moment and he had a strong desire to become one of the team (this will be described later), he tried his best to improve himself to become as capable as others in the group. Therefore, by way of making comparison, he discovered the differences between himself and other colleagues. Since he had a strong desire to become one of them, a keenness to close the gap was developed. However, he had a problem with his age. Since the desire was so strong and he also believed that the result of the practice might bring him extra benefits, he ignored the barrier of age and finally achieved the desired outcomes. Accordingly, in Mr. N's case, it was the identity which pushed him to make a comparison and it was the comparison which started his learning journey. Gaining

group acceptance and making comparisons are two keys which enable me to trace individuals' motivation to learn. This situation will be discussed more in Chapter 7.

Both Mr. J's and Mr. W's cases illustrate, within the formal organisations, how individuals' learning is motivated. Mr. J uses management strategies to direct organisational activities. He also uses some mechanisms to acquire and store the knowledge derived from people's interactions (this has been described in Chapter 5), while Mr. W participates in group activities and influences the group dynamic. Although both cases also include some informal networks which will be discussed in later chapters, the main context of these two cases is a formal system in which members are bound by official duties. This situation is very different from the concept of CoPs, which is generally recognised as referring to informal networks. The reason for using the two examples of formal organisation is that the border between formal and informal networks is not absolute, especially when some encourage the establishment of informal communities within a formal organisation. In this situation, the concept of CoPs seems to apply between formal and informal settings. In terms of the key person's attitude, Mr. J adopted a rigid attitude in order to form the common value and to discipline employees. Mr. W seemed to show a friendlier attitude to interactions so that he was able to join the tradition. The following, the case of Ms. M, shows an informal network within a formal team.

6.3 Case 3: Charisma / Ms. M's Informal Network

In the department where Ms. M worked, there were only five persons available to be interviewed. Ms. M was not the team leader, but she was the soul of the team. She had developed an informal network to help the formal organisation.

The main duty for employees in the department was to develop and control important policies issued by the TPG. Mr. T, the team leader, was the first person I interviewed in the group. He introduced me to Mr. F. Having conversations with Mr. F, I became aware that Ms. M played a significant role in the team. Mr. F also recommended that I interview Ms. L. In this department, each person was assigned different tasks. In order to know the influence of different tasks on people's learning, Ms. K, who had just transferred from another department, was also interviewed. For this case, I focus on Ms. M's informal network, because the influence of the network on the team seemed stronger than that of Mr. T's leadership style. This case shows some interactions that are similar to those in communities of practice. Information about the interviewees is shown in Table 6.3.

Table 6.3 : Interviewees in the Department where Ms. M worked

Name	Age	Years of Service	Title of position	Date of interview
Mr. T	54	28	Supervisor	6, Mar 2001
Ms. K	33	8	Subordinate	18, Apr 2001
Ms. L	40	15	Subordinate	18, Apr 2001
Ms. M	43	18	Subordinate	19, Apr 2001
Mr. F	28	5	Subordinate	9, Mar 2001

Both the cases of Mr. J and Mr. W show that there seems to be a power in groups, which unifies employees' direction and efforts. Mr. J builds up the power, yet Mr. W participates in the power. However, in Ms. M's team, she (Ms. M) seems to be the power itself. She was not the nominal head, yet most members in the team always regarded her ideas with great respect and gave top priority to her proposals. According to Ms. L., Ms. M had more experience and was always happy to help colleagues. Mr. F. echoed Ms. L.'s opinion about Ms. M and said, '*When I had no idea about some new tasks, Ms. M was the person whom I always asked, and I normally could get the answer*'. Ms. K. was a female shift worker in the group. Her opinion about Ms. M was

that '*Ms. M taught me a lot. She knew very well about how to make the system run. Even the team leader usually uses her proposals.*'

Because Ms. K.'s work time was different from others', the main work which she undertook was to continue other colleagues' work. Because she had to take on other people's work, it was necessary for her to understand what the previous one had done and the whole context of the tasks. She said that it was Ms. M who gave her a hand all the time. A willingness to help others can be purely altruistic but it often earns respect and leads colleagues to do favours in return. However, feeling happy to help people is only a part of Ms. M's character. According to Ms. K., '*Personally, I think she is a very responsible person. Last time we were given a task which was about community development in a certain area. In order to benefit the population at large, she insisted on a proposal which annoyed the local government. In the end, even though the proposal was still rejected by superiors, we all knew that it was not her fault. Personally, I thought that her courage was an example to all of us*'. Ms. K.'s words seem to point to an important factor of Ms. M's charisma, which is her courage derived from her sense of right and wrong. Not only did she have strong convictions, but also she had the bravery to persist in doing the right thing. Her insistence seemed to lead others to reflect on the duty and honour of being a public servant.

The team was responsible for some important policies. Not only did the team have to plan the policy, but also it had to find appropriate public or private institutions to implement the policy. In this situation, members in the team were required to have qualified knowledge. Ironically, Ms. M, the most knowledgeable one in other people's view, did not have any professional certificate. She had gained only a Master's degree in public administration in America. Other people, such as Ms. L., Ms. K. and Mr. F.,

had either some professional licences or some experience of doing professional research for a long time. However, according to Ms. L., Ms. K. and Mr. F., professional knowledge was important, but it could not work without having practical knowledge of public administration.

There were nine people in the team. I got five interviewees. The first time I met Ms. M, she said, '*Welcome to our office! Anything I can do to help, just let me know. I will try my best to give you a hand*'. I could feel her energy at that moment. She kept saying, '*We are still vigorous*'. It meant that their team still worked very well and was not affected by the downsizing policy. I suddenly realized that she had already grasped that the focus of my research was on the downsizing policy. She was a gentle woman and spoke slowly but clearly and logically. She said that the team was made by the team leader and she just tried her best to complete her tasks.

Ms. M did not say much about herself and how she helped other colleagues. When I asked '*Why does the team look so vigorous?*' She answered, '*To start with, my colleagues are excellent. Whenever we are given a task, we are all keen to get it done as soon as possible. In this job, I can use my skills and knowledge to benefit the population at large, not just my company as in my previous job. I enjoy my work more now.*' The same question was answered by Ms. L. She believed that Ms. M played a very important role in making the team work and always had a good relationship with colleagues. She said, '*One of my colleagues sometimes has arguments with another female colleague. He shouts at everyone in the office, but never shouts at her. For me, she is a good friend. We help each other and she sometimes gives me advice on my personal life*'. It seems to me that Ms. M's charisma has been merged into her

interpersonal networks. Through offering help to colleagues, she won members' trust and respect.

6.3.1 Individual's behaviour is affected by 'Charisma'

Since the team was responsible for making and evaluating some important policies, members in the team had heavy work-loads. However, Ms. K. was, in her own view, not very busy. She was transferred from a technology department, and entered the department a year ago. Not much duty was assigned to her. Ms. K. said, '*Sometimes I feel guilty, because I do not have much work to do so I can only give them little help.*' Ms. K. felt uncomfortable when she detected that all the people around her were busy on the team's work and she could not help it more. Her feeling of guilt makes her want to do something for the group, and to learn something for fear of being a useless person in the group. It seemed to her that she tried to gain group acceptance, which was similar to what Mr. N did in the group where he was. Because all members in the group were busy, Ms. K., who had a smaller work-load, became very noticeable. Her learning was also inspired by the desire to gain acceptance. So far, according to Mr. N and Ms. K., we find that the desire to be accepted by the group can become a sort of power to pull group members in a certain direction.

6.4 Three Types of Leadership

Although this study does not focus on leadership, these key persons' value systems and actions affect other colleagues' mutual engagements. Swan, Scarbrough and Robertson (2002:477-496) suggest that managers try to use communities of practice as a device to lever unsatisfactory situations into positive ones, even though they may not be able to direct the development of the communities.

The key persons in the three groups bear their important values in mind. Ms. M focuses on serving the public. Mr. J concentrates on running the organisation well. Mr. W pays attention to dealing with official business smoothly. Actually, it seems to me that the three aims complement each other. Although their aims bear a strong relation to each other, they have different ways to achieve their goals and to drive cycles of change (Denis, Lamothe and Langley 2001:809-837). Mr. W seems always to reflect a balanced and positive orientation toward members and tasks. In Masi and Cooke's (2000:16-47) view, a transformational leader keeps inspiring employees and helps employees to share visions and to obtain commitment and motivation through team activities. Mr. W's style of leadership echoes Masi and Cooke's idea of the transformational leadership behaviour. Mr J deliberately uses particular methods to obtain his objectives but other group leaders seem to achieve their results almost by instinct. Both the formal leaders have already established their team visions by way of interactions with members (Baines 1997:205). People are thus consciously or unconsciously involved in interactions between power and knowledge.

Ms. M's story is different from that in Mr. J's group. Mr. J also has the ideal of serving the public. He tries to hide himself from the organisational value system and to establish a 'Hero' in order to interact with the value system, which is also built by Mr. J himself. Through seeing the example of interaction, members can then realise that certain behaviour may lead to some positive results. The value system is designed to select good behaviour and stop bad performances. The 'Hero' exists to encourage members to realise that certain thinking and behaviour is applauded in the system. The 'Hero', who is Mr. R, has the sense of responsibility and honour, which is similar to what Ms. M has. However, Ms. M's belief is triggered and supported by herself, yet Mr. R's is supported by Mr. J and the system.

6.5 What do the three cases mean for the concept of communities of practice?

The above three cases express three different styles of organisational dynamic. In terms of leadership, Mr. J uses strategies to build members' common value. He also employs management mechanisms in order to control the situation, while Mr. W enters into activities and influences interactions. Ms. M shows her responsibility and capability and her pleasure in helping others, so colleagues do not mind sharing their ideas with her.

In terms of communities of practice, the three cases are not authentic communities of practice, even though Ms. M's case may present many similar features to the concept. However, the three cases identify something in common in relation to people's interactions within an organisation. These common items are, in my opinion, components of a community of practice.

6.5.1 Common Value and Practice

First, in communities of practice, members' common practices are highlighted. According to Millen and Muller (2001:1), '*the members of a community of practice have common methods, procedures, and knowledge, and have a need to share information, resources, and expertise with one another.*' In some communities, people get together for the purpose of sharpening particular knowledge. In other words, their common practices are formed by their common requirement, which is to acquire knowledge (Rogers 2000:386). In Mr. J's group, to form a common value was important, because the TPG is a liberal environment with security of employment, and is effective in assigning tasks to employees but not effective in disciplining or

motivating them. As a result, not all the employees have a strong desire to do something for the organisation or for themselves. Establishing a common value is, in my opinion, a way to bring order out of chaos. As order is reinforced, people's behaviour in the environment comes to be predictable.

Mr. J's case makes me think about the relationship between common practices and a common value in an organisation. In Mr. J's case, the common value seems to affect individuals' value systems so as to produce shared methods, languages and practices. In Mr. W's team, the tradition of the team seems to discipline members to aspire to excellence in the way they do their work. In communities of practice, people join the community voluntarily and they also know what they aim at in the community. Although people may have personal purposes in the beginning, they develop a common sense of purpose through community activities (Breu and Hemingway 2002:148). This situation seems to show that the common ground that is established within a community of practice ranges from bottom to top and from internal motivation to external changes. I would suggest that certain key conditions must be present to enable the internal motivation to be translated into external action. These key conditions determine, in my view, which ways the interactions will go, how they work and what the processes and results will be. So, apparently, the operation of a community of practice is very different from Mr. J's ways of making the learning organisation, yet it seems somewhat similar to Mr. W's participating in discussions. Ms M's informal network seems to reflect more features of the idea.

Because the community organizes knowledge activities in relation to individuals' respective interests, people in the community develop common vocabularies and share common practices (Carotenuto et al 1999:2). The common ground, which enables

members to share knowledge quickly, seems to result in a positive growth of knowledge management in the organisation. However, this method of developing knowledge depends on the social context of interactions very much, so the effect and efficiency of learning are not always satisfactory. (The social context of interactions, which includes power, market, attitude, identity and so on, will be analysed in later chapters.) For example, focusing on the common value too much, certain kinds of knowledge may be highlighted so that the power of the group to direct the thinking of individuals is strengthened. The power and the market construct each other and they both direct individuals' learning.

6.5.2 Network

Second, the concept of network is also highlighted in this research. A value system in an organisation is established by developing networks and by people's disseminating particular values, no matter whether or not the system is built by a conscious (Mr. J's case) or unconscious (Mr. W's and Ms M's case) decision. These networks become a useful resource on which members can rely to develop their interactions.

In terms of communities of practice, Wenger's idea of sharing knowledge indicates that good communities of practice are groups that have well-knit networks. Wenger suggests that knowledge can be shared and developed in the community, which means that there are well-organized structures to share knowledge and there are also mechanisms to digest information. Ardichvili, Page and Wentling (2003:64-77) also argue that the Knowledge Network system in Caterpillar provides its communities of practice with experts to integrate knowledge into the organisation. Because it has a tight structure and appropriate supporting mechanisms, knowledge in the community

can be managed well without disorder. Because of these developed networks, established knowledge can be shared easily without any obstacles.

In the first of my three cases, Mr. J understood this very well and also tried to cultivate some informal communities supported by his "organisational learning mechanism". This idea echoes some scholars' suggestions about building communities of practice within a formal organisation. However, in the three cases, the experiences of having informal networks in an organisation are very different. Although Mr. J's group has a good formal network so that people in the department could sort out problems fast by way of the knowledge mechanism (this has been mentioned in the previous chapter), most interviewees did not agree with Mr. J's rigid style of leadership (this will be discussed in later chapters). Mr. W's actively participating in activities and his friendly attitude to colleagues seem to improve the relationship between supervisor and employee. Ms. M's informal network makes her colleagues pleased to share their ideas and feelings with her. This situation seems to make knowledge sharing more possible. However, do these situations mean that Mr. J's way of running the system was not satisfactory? I do not focus on judging which style is the best practice, but on why these key persons organized their networks in the ways they did. Some of them acted deliberately, others unconsciously. How were these networks formed? And what do they mean for communities of practice?

The concepts of common value and networks are two starting points in this research. In terms of individual learning, people consciously or unconsciously learn something through the process of interacting with the common values and the process of networking relations. These interactions also enable me to trace the reasons why people's learning is triggered, keeps developing or is stopped. In the fields of

communities of practice and social networks, scholars such as Wenger (1998b), Nahapiet and Ghoshal (1998:242-266) also discuss the individual's identification within a community network. Within these circumstances, people deliberately or unconsciously try new things, participate in activities or advance particular opinions and values, in order to gain group acceptance or engage in exchanges. Based on these interactions, an organisational culture and value system is gradually constructed and modified. Being accepted by the group and engaging in exchanges with others become stepping stones by which individuals in organisations are motivated to join group activities. Common values in an organisation provide members with criteria to compare themselves with, so that people may reflect on their established knowledge when they try to merge their individual system into the common values. During the process of gaining group acceptance, individuals interact with their colleagues and the environment so that their formal and informal networks are gradually established. Dealing with networks, people share their insights with each other. In some cases, this sort of exchange also explains how knowledge develops in the group.

Situations such as the above indicate four elements of people's interactions: gaining group acceptance, making comparisons, establishing networks and engaging in exchanges. Gaining group acceptance is a motivation triggering interactions. Making comparisons enables individuals to reflect on their experiences so as to enable them to acquire new understandings within these circumstances. Networks facilitate knowledge sharing and also reinforce some influences from interactions. The concept of exchange implies the power of the market, which affects the development of knowledge creation and sharing. These elements will be discussed in the next chapter.

6.6 Summary: The Three Cases

The cases which have been introduced in this chapter indicate that each group has its own background, which leads to addressing a specific power of group dynamic. For instance, the common value in Mr. J's group is distinguished. It provides members with a clear criterion by which people in the group are able to identify their positions so as to adjust themselves to the group identity. On the other hand, the focus of Mr. W's case is on members' participation. Even though the tradition which has been found in Mr. W's group has a similar function to the common value in Mr. J's group, Mr. W's attitude to the tradition is different from Mr. J's to the common value. The different attitudes then produce different effects that direct the groups in different ways. Compared to the above cases, Ms. M's story highlights the role of an informal leader who establishes interpersonal networks so as to improve the group dynamics.

All of the three cases imply four elements of interaction: gaining the group's acceptance, making comparisons, establishing interpersonal networks and engaging in exchanges. Through these interactions, individuals gain new understandings not only to improve their professional knowledge, but also to comprehend the meaning of the world. In this situation, knowledge creation is a by-product of comprehending, while it is also the foundation and the result of one's daily sense-making activities.

The four elements of interaction seem to be associated with one another. Some scholars discuss the elements individually in terms of communities of practice to point out the influence of a particular element in the knowledge process. However, few people integrate the four into a whole concept, although I doubt whether or not the four items can exist independently. Accordingly, the following analysis is going to deploy

the four elements of interaction to highlight the relations between knowledge creation and individuals' participation within a bureaucratic structure, such as the TPG.

Chapter 7

The Four Basic Elements

According to Wenger, McDermontt and Snyder (1998:29-32), a community of practice can be viewed as a group of people interacting in a field defined by the domain of knowledge concerning their group's formal or informal activities. According to Wenger (1998a:188-197), individuals are related to the community as a whole, and one's sense of identity strongly affects one's attention so as to influence one's interactions with others. Starting from one's sense of identity, four concepts (gaining group acceptance, making comparisons, establishing networks and engaging in exchanges) were identified in the previous chapter. In this chapter, I will present the four concepts as basic elements in forming people's interactions and discuss them in depth in terms of knowledge and learning.

This chapter first argues that one's desire to be accepted by the group is a motivation that encourages people to try to achieve particular goals. Through the process of pursuing particular goals, individuals make comparisons between themselves and 'similar others'. They may then understand more about themselves, the approaches to achieving goals and their views of the world. In terms of learning and knowledge, gaining group acceptance and making comparisons are the two concepts that explain why people's learning is triggered and how the learning happens.

Secondly, in this chapter attention is also focused on the influences of interpersonal networks and exchanges on people's interactions. In order to exchange resources, people establish interpersonal networks, which enable them to develop further interactions. In these circumstances, people are motivated to learn particular skills, which may not be those which the organisation initially wants them to learn. Both

concepts, establishing networks and engaging in exchanges, explain why people continue their learning within the organisation and how these interactions affect individuals' learning and knowledge.

The above four concepts will be discussed individually in this chapter. I will, initially, justify why I view them as basic elements in terms of learning and knowledge. These discussions will then lead to some examples discovered in the TPG, which enable me to rethink the concept of CoPs.

7.1 Why are the four elements described as basic?

The four elements (gaining group acceptance, making comparisons, establishing networks and engaging in exchanges) interact with each other and also identify one's learning motivation at different stages. Because they trigger interactions within organisations so as to make individuals consciously or unconsciously acquire knowledge, in this study I describe them as basic elements. The desire to be accepted by the group can be viewed as individuals' initial motivation, by which they learn things consciously or unconsciously while pursuing group acceptance. During the process, they make comparisons, so that the differences between themselves and other people in the group will be identified. In other words, the desire to be accepted triggers employees' learning motivation, while making comparisons enables them to reflect on their own value system and knowledge structure.

Individuals' learning motivation does not derive only from their pursuit of group acceptance and from their making of comparisons. Cases in this study (which will be introduced in later sections) also suggest that people establish their formal and informal networks in order to exchange resources. The concepts of networks and

exchanges imply that the resource distribution is directed by the power of the market. In order to acquire resources, people learn how to choose the most appropriate ones, to access them and to take advantage of them. The concept of the market explains not only how the individual's learning motivation is triggered, but also why particular knowledge is valued. In other words, establishing networks and engaging in exchanges do not only initiate but also continue one's learning motivation.

Interactions between the four elements reflect individuals' real life, through which people consciously or unconsciously interact with each other so that their insights are shared and new understandings are constructed. Gaining acceptance and making comparisons can be viewed as the processes by which individuals seek to be recognised by the group so as to keep themselves safe in the organisation. Formal or informal networks and the concept of exchange indicate the distribution of resources within the environment, which enable individuals to identify the resources and to take advantage of them. In terms of learning and knowledge, each of these elements can inspire individuals to learn things, while each of them can also continue or stop people's learning motivation. Because the four elements do not only trigger but also continue as influences on learning, I name them basic elements.

In the previous chapter, because Ms. K believed that she belonged to the group, she tried her best to become as capable as other employees were in the department. On the other hand, Mr. N did his best to learn new skills in order to gain acceptance, although he was the oldest one in the group. Being involved in a group provides members with a sense of identity and a chance to make a comparison -- both at the individual level and at the community level. Highlighting the concept of identity and making comparisons,

the following sections argue that there is an interactive relationship between knowledge creation and the individual's practice.

7.2 Gaining Group Acceptance

The reason why people hope to be accepted by their groups is that they identify their position and self-concept by way of other people's views about them. According to Super (1990), self-concept includes a person's perception of his or her environment or situation as well as of him- or herself. Even though the focus of Super's work is heavily on the influences derived from one's opportunities in life, such as the individual's career or the environment (Arnold 1997:130), this concept also involves a close relationship between the individual and the community in which he or she lives.

This term self-concept was proposed by George Herbert Mead (1934:143-147), and implied that from birth, the individual communicates with his or her environment through gestures, continuing to do so throughout his or her life. He defines the terms 'I' and 'Me' to distinguish an inner self from a social self. The 'Me' that connects to the wider society is the so-called 'self-concept'. Mead's intention is to persuade us to stop thinking of the individual as a unitary 'person', but to think of the self as a complex with varied dimensions (Worsley 1976:47). Cooley (1956:184-185) echoes Mead's idea and suggests that an individual's sense of self is an image that is derived from his or her own perceptions of others. In other words, the individual will reflect on his or her own image of self by feeling how others see him or her. Accordingly, the self-concept implies that the individual views him- or herself through the eyes of others. The self-concept is constructed by an ongoing process. The individual's experiences of other people's views about him- or herself become the individual's self-image, which provide him or her with a ground to construct his or her "self-

expectation". From this point of view, when people interact with their colleagues, they are not only concerned about "the eyes of others", but also try to fulfil their "self-expectation". The former implies that people do not want to fall behind others; the latter indicates that people also want to maintain their personal styles. I will discuss these two concepts later.

7.2.1 Gaining Acceptance, Triggering Learning

The desire to be accepted by the group motivates members to acquire necessary knowledge. Mr. N worried about whether or not he was capable enough to become a member of the group. When an individual feels embarrassed by his or her slow promotion, he or she may try to gain respect and recognition by some other means. For example, some of Mr. N's competition articles were successful, which enabled him to identify himself as an insider. Accordingly, people who pay more attention to promotion may tend to associate their identity with their career. They may work harder and learn more in order to gain more opportunities of development for their career.

Individuals' learning in these circumstances was motivated by the desire to be recognized by the group. In order to enter the organisation and keep themselves in it, people try to learn the shared languages and basic practices. This explains how one's internal motivation is transferred into external performances.

In addition, people evaluate the relationship between themselves and their organisations by what they put into the organisations and what they get from them (Huseman and Hatfield 1990:98). In order to get promotion, Mr. W does not only evaluate the environment which he is in, but also re-examines himself. He said '*Most of the people in the same position as me have a master's or a bachelor's degree and so*

their opportunities are always more than mine. That is the reason why I should keep disciplining myself and publishing my articles. This is the way to catch up with them'. Mr. W's idea implies the importance of 'identity'. It is the desire to keep up which encourages members in the group to keep moving. People in the group try to conform themselves to the group identification.

7.2.2 A Passive Motivation

The effects of identity on individuals' behaviour are, in my view, often passive. According to the interviewees in Mr. W's group, the reason for their working harder or caring about the promotion opportunities is not that they would like to achieve a higher position but that they want to maintain their identity and to keep themselves progressing in order to avoid being behind (e.g. Mr. W in the group).

Mr. X, in the same group, believed that the individual would feel embarrassed if he or she could not keep up with the team's progress. He said '*We do not ask for overtime pay, even if it is necessary to work overtime. Other people will laugh at you if you do so, because it is your duty to complete the tasks. You will feel ashamed if you need to work overtime, since you cannot finish your duty in time*'. Mr. N, another employee in the same department, was afraid that he could not keep up with the group's progress. He said, '*You might be behind one or two persons in the group, yet you could not fall behind your team*'. Therefore, one's motivations for doing things do not derive from a wish to achieve a better identity, but from a desire to maintain one's basic image about one's self within the organisation. This sort of passive motivation, however, leads to a positive eagerness to act, because the individual may be expelled mentally from the group if he or she cannot achieve the group's criteria. The individual then has no choice but to hold an active attitude to learning.

At the individual level, gaining group acceptance seems important to some individuals and thus has a large influence on their behaviours. The effort to gain acceptance discussed above can lead to two developments. Firstly, the passive effect of gaining the group's identity can trigger a positive eagerness to act. "The eyes of others" do not only motivate individuals (for instance, Mr. N and Mr. W) but also promote the development of group identity and act as a catalyst for the development of the group dynamic (for example, Mr. X felt embarrassed if he asked for overtime pay). Secondly, from the angle of the active effect of one's self-identity, the individual's self-expectation emerges from the process of gaining group acceptance. He or she may try to find a leverage point to fit him or herself in the relationship between self-identity and group identity.

7.2.3 The Eyes of Others

"The eyes of others" does not only mean other people's opinion of the individual, but also the individual's own view of himself or herself, according to a criterion in his or her mind. The criterion is also related to a position in the individual's mind in which he or she locates him or herself within his or her group. For example, employees in the TPG are given an annual appraisal so that they know the outcome of their own performance evaluation and of those who are at other levels (Ms. E). The annual appraisal classifies members in the organisation into different levels. People within the same level share certain common characteristics, such as identical marks in the organisation or similar reputations as employees. They then regard themselves as insiders in a distinct community. Berger and Luckmann (1967:153) suggest that people identify who they are through how other people interact with them. The motivation to become an insider also triggers certain actions of the individual.

In Mr. W's group, it seems that everyone has a strong sense of responsibility and honour. However, since the intensity of the sense varies from individual to individual, members in the group seem to compete with each other. Gaining group acceptance becomes a process which identifies differences between the individual and other colleagues. This situation seems to echo what Tajfel (1978) refers to as 'social identity'. This identity is based on one's self-concept which '*derives from his knowledge of his membership of a social group (or groups) together with the value and emotional significance attached to that membership*' (Tajfel 1978:63). The desire to be an insider makes people strive, not to be the best performer but to avoid falling behind other colleagues. In this situation, the sense of responsibility and honour has become a sort of group identification. For instance, the head of one of the departments in the TPG suggested: '*You will feel very uncomfortable if a person who got into the organisation at the same time with you has been promoted to manager while you are still a basic employee'(Mr. S).*

Mr. N recalled why he made the decision to become a public servant in the TPG and concluded that his reason was that he did '*not want to be an outsider of the group*'. He was born in the Chun-Shin New Village where the headquarters of the TPG is located. Since his neighbours all worked in the TPG and they all had a good income and high status because of their careers, he set his ambition to become not only a public servant, but also a public servant in the TPG. Because he always kept in his mind that he belonged naturally to the same level as his neighbours, he studied hard in order to enter the career. In his case, he set his goals and learned the ways to obtain them, because he had imagined himself as a person who was on the same level as his friends and neighbours. The effect of "The eyes of others" leads the individual to particular

behaviours. Learning may happen when the individual tries to achieve his goals or perform the behaviours.

7.2.4 Self-expectation

People in the group face the dilemma of worrying about being behind or caring about being not unique enough. On the one hand, people hope that they can behave in the same way as other people do, in order to be accepted by the community. On the other hand, they want to keep their own style even when they merge themselves into the group. This dilemma reveals the discordance between self-identity and group identity. Some people try to find a leverage point to cope with the contradiction, while others devote themselves to resolving the conflict interactions so as to construct a new order for themselves.

The previous section seems to show that Mr. N's learning is strongly related to gaining the acceptance of the group. However, Mr. W, the head of the group, views the power which pushes members to go forward as a 'self-expectation'. He believes that the success of his group depends on a shared tradition of each individual living up to his or her 'self-expectation'. He said, '*The "self-expectation" agitates employees to strive upward. Through invisible networks or relationships in the organisation, this concept is spread all over the department so that all the members share the same attitude*'.

It seems that people in the group, such as Ms. O, Mr. N and Mr. X, not only worry about whether or not they can gain group acceptance, but also care about whether or not they can achieve their personal goals. Some of the personal goals (such as Mr. N's, Mr. X's and Mr. W's) are constructed during the process of interactions, and others are formulated before individuals enter the organisation. For instance, Ms. O's positive

attitude to tasks derived from her strong desire to serve the public. She also attributed the excellent spirit and performance of the group to this fact. During the process of obtaining goals, individuals show their attitudes to interactions so as to affect other colleagues' performances.

In short, understanding other people's views (the eyes of others), individuals identify their positions fixed in the group. Individuals also determine whether or not they should follow the group's identity by way of their self-expectation. Even when people choose an appropriate role in order to fit themselves into a community, they retain in most cases an independent sense of right and wrong, which derives from self-expectation. Developing this moral sense is just as much a part of gaining identity as is conforming to the group, so the process of establishing identity can sometimes pull in contrary directions. Through the processes of comparison and judgement, the individual may realise whether or not the present situation is suitable for him or her so as to adjust him or herself to the group or to seek another identification. This situation draws our attention to the point that a large part of the incentives of knowledge creation relies on one's value system and the process of making comparisons. The focus of the next section is on how making a comparison can facilitate knowledge creation.

7.3 Making Comparisons

The cases of Mr. N and Ms. K cases have already been discussed in the previous section. They compared themselves with their colleagues. They were worried about whether or not they could be accepted by the group. Consequently, they tried to participate in the group activities. Both cases not only underline the relations between

gaining group acceptance and one's motivation to engage in activities, but also imply that making comparisons is a stepping stone in knowledge creation.

According to Abrams and Hogg (1999:253), '*people have a fundamental need to feel certain about their world and their place within it – subjective certainty renders existence meaningful and thus gives one confidence about how to behave, and what to expect from the physical and social environment within which one finds oneself*'. Because people may strive for the certainty that is subjectively important in order to have control over their life, making comparisons becomes one of the keys to checking their cognition against physical and social reality so as to reduce uncertainty (Festinger 1954:117-140). However, when the environment lacks an effective method of evaluating one's status, in order to understand one's position in the community the individual may make comparisons with his or her peers (Kruglanski and Mayseless 1990:195-208).

7.3.1 Uncertainty

Uncertainty arises when the individual discovers that his or her beliefs, attitudes, feelings and behaviours are different from those of the peer group. Uncertainty is reduced when others agree with the individual or the individual comes to accept the opinions of the group (Abrams 1996: 143-167). Some scholars, such as Bartel (2001:379-413), believe that making comparison is based on guess, conjecture, or rationalisation. Individuals collect new ideas from other knowledge sources during the process of resolving uncertainties. They make comparisons between the new information and their established knowledge and try to integrate the new insights into their original knowledge structure.

Although the process of identifying the individual's position in a group may inevitably make the individual compare him or herself with others, making comparisons does not necessarily derive from a desire to gain the group's acceptance. It sometimes derives from particular goals that are important to the individual. Because the goals lack a criterion of evaluation, the individual relies on the performances of peers in order to identify his or her own. Making a comparison in these cases is therefore related to an important goal, an uncertain circumstance of evaluation, too little confidence and too much stress. In order to cope with the stress or the uncertainty, the individual tries his or her best to perform as well as other members do. For the purpose of easing the stress, the individual engages in learning activities consciously or unconsciously so that new knowledge may be created.

Pursuing group acceptance and making comparisons contribute to each other. In order to be recognised by the group, individuals identify differences between themselves and other members. Through making comparisons, people can then identify their positions in the organisation. These mutual interactions do not necessarily close the gaps between the "self" and the acceptable "self", but make people understand more about themselves and their views of the world.

7.3.2 Integrating Diverse Experiences

As I have already pointed out, some of my interviewees had had other careers before joining the TPG. Through making comparisons between their own different careers, these people try to find common ground to link their present situation with their history. Ms. D compared her interactions with her present supervisor and with her previous boss, and she then understood the subtle relationship between subordinates and supervisors. Ms. F compared her present job in the TPG and her past career in the

private sector, and she concluded that she preferred doing her present work, because she could serve the public at large. It seems to me that they tried to find relationships between new and old information, in order to integrate the fresh experience into the established structure of knowledge.

On the one hand, people compare their current experience with previous ones so that they may understand which role they should not play in certain circumstances. Mr. K keeps changing his career in order to improve his position in society, even though he has experienced several careers, such as a research assistant in the University, an agent in a private company and the present career in the TPG. He has already known some jobs which were not suitable for him, yet he does not know what sort of career will be his best choice.

On the other hand, individuals examine their life history in order to identify gaps between their present situations and the lives they may want to have. Through the experiences of working in the TPG, Mr. M knows what he has to do in order to become a supervisor in the public sector. He compares his present qualification with the standard so as to understand how big the gap is. He is now studying and networking in order to further his career. In the above cases, individuals also try to seek a basis from their established knowledge in order to digest their new experiences. Making comparisons, they know some roles that are not appropriate for them and they also evaluate the gap between realism and idealism in order to determine their actions.

The four people mentioned above devote themselves to their jobs and realise who they are and what they need for the next step. The common ground then leads them to a new understanding of themselves. Ms. D understands how to adjust herself to different

styles of supervision. Ms. F reveals her will to serve the public. Mr. K understands the limitation of his capability. Mr. M dreams about his future career. All of them compare their present situation with their history so as to create clues to knowledge for themselves.

7.3.3 Passing a Judgement

Comparison is incomplete by itself; it needs to interact with the individual's judgement, which derives from his or her identification and knowledge. Thomas, Kellogg and Erickson (2001:865) suggest that '*The behaviour of an individual is highly influenced by context, and yet people give explanations for their behaviour based on their own internal values.*' Because of identifying him- or herself, the individual knows his or her position within society so that he or she is able to know which role he or she should play and with whom he or she is going to play it. Because of the individual's knowledge, he or she knows what resources he or she can exploit in order to play the role appropriately.

In the conversation with Mr. M, even though he mentioned at the beginning that his decision to enter the TPG was because his family encouraged him to choose this career, he also used his judgement to determine to go this way. He found that the labels associated with being a teacher in a primary school and with being a public servant were different (this process can be described as knowing the differences through measuring the different identifications). He also considered the risk of taking the examination, so he did not quit the job soon after having the idea but only after the qualification was really gained. (this can be classed as an example of realising the possibilities through his established knowledge). In this situation, the individual not only compares his or her self-identity with group identity in order to find a position to

locate him or herself but also keeps updating his or her knowledge base so that the individual can have sufficient resources to use.

7.3.4 Forming a Habit

Making comparisons provides the individual with an opportunity to identify different resources of knowledge, while integrating diverse experiences enables the individual to reflect on his or her established knowledge. The process of passing a judgement enables the individual to adopt particular knowledge to apply to his or her behaviour. This process includes the concept of practice, which means that the individual manipulates the particular knowledge repeatedly and consequently forms a habit. Making comparisons and integrating diversities improves the habit, and also revises the habit. The habit defines and directs the interactions between knowledge and practice. Unless the impact that derives from making comparisons is strong enough to change one's behaviour, the individual tends to maintain his or her habitual practice. Accordingly, even though some new ideas may emerge from the process of making comparisons, the individual's learning may still be dominated by his or her habitual practice, if the new idea is not important enough. Therefore, without changing repeated practices, the effect of knowledge creation is very limited.

Ms. F has been used to observing new things and making comparisons, which enables her to understand quickly what her tasks are and how to complete them. When she was a child, she usually found new ideas through making comparisons and her parents also encouraged her and her brothers to do such comparing of things (Ms. F). Her experience echoes Rogers's (2001:64-65) that one's early experience may affect one's self-esteem and influence one's attitude to others. The habit of making comparisons provides her with opportunities for acquiring knowledge. According to her, because of

this habit, she learns things more quickly than do others. She said, '*I used to work in the archive office. I was always curious about what the contents of each archive were. I read them bit by bit. Gradually, I reviewed plenty of documents so that I knew a rough route to handle a public project. As a result I gained a lot of praise for the way I dealt with paper work in other offices*'.

Reviewing Ms. F's words, it is not that the documentary system provides her skills or knowledge directly, but that the system offers her opportunities for observing and reflecting. This situation highlights the function and the importance of the documentary system in the TPG. However, this system is not the main reason for her learning being quicker than that of others. Other people who worked in the archive office for a long time could not handle things as well as she did. It is her habit of learning which makes her grasp the whole situation quickly. The system is only a factor which helps her to grasp situations. We may also say that she has her own way of learning, which is to make comparisons. Because making comparisons has become one of her habits, she cannot help maintaining this behaviour, consciously or unconsciously, when she deals with her daily-life events.

7.4 What do gaining group acceptance and making comparisons mean in terms of communities of practice?

According to David (1997:34-42), communities of practice are always there while people are working together. People acquire understandings and develop learning on the job and from working together. Learning in these circumstances is associated with the whole person in an "evolving set of relations"(Richter 1998:299-316) . In terms of learning, '*learners enter a community of practice and, over time, move closer to full participation at their own pace as they gain knowledge and learn the community's*

customs and rituals' (Graham, Osgood and Karren 1998:34-38). Wenger (1998a:95) suggests that the period of legitimate peripherality enables participants to integrate the culture of practice into their own knowledge structure. The concept of legitimating peripherality describes the process of a newcomer's gaining group acceptance.

The main reason why one's desire to gain recognition and acceptance affects knowledge creation is that the individual may be able to engage in personal reflection during the process of gaining group acceptance. According to Wenger (1998a:145), '*Building an identity consists of negotiating the meanings of our experience of membership in social communities*'. During the process of identifying the self, it is possible that the individual will compare him- or herself with his or her peers so as to realise the difference between 'Me' and 'I'. Although Wenger (1998a) has pointed out that '*Identity is the vehicle that carries our experiences from context to context*' (p.268) and '*it is produced as lived experience of participation in specific communities*', he does not theorize further about why identity can become the vehicle and why lived experience can produce identity (p. 151). The findings in this study seem able to answer the above questions.

7.4.1 Identity is the Vehicle that Carries Experiences

The most important idea, it seems to me, in relation to the metaphor of a vehicle is that identity is formed by accumulated experiences. These experiences are varied because each of them derives from a unique context. In these circumstances, members share common concerns even though they contribute to the group in their particular ways (Gudykunst 1991:143-144). If the individual always agrees with common values in the group, the issue of identity will not be a problem. When common values are different from the individual's value system, the individual becomes aware of the issue of

identity. In order to be accepted by the group, he or she may start making comparisons, passing judgement and even changing his or her habits.

Accordingly, the process of gaining group acceptance highlights the importance of making comparisons. Making comparisons can be viewed as a process of identifying diversities, while gaining group acceptance is the course of seeking similarity. When people compare themselves with colleagues, they try to explore the differences between themselves and other people. In other words, the desire to be accepted by the group is a motivation which enables the individual to make comparisons. According to Klein (2001:744), human beings tend to acquire information about their peers in order to assess the feedback about their performance. This situation implies that during the process of gaining group acceptance not only do individuals evaluate themselves, but they also try to construct a measurement base, which enables them to compare themselves with others. Making the comparison, in these circumstances, provides the individual with opportunities to explore varied views about the concept of 'self'.

When people identify these different views, they are restructuring their established knowledge. They look for a linkage which enables the new knowledge to be associated with the established one. Lawrence (2000:6-7) suggests that what people themselves perceive is the base of their behaviour and that when they perceive themselves in a more positive light they will be more motivated to learn. According to Mussweiler (2001:38), an upward comparison may be inspiring if the individual can assimilate his or her self-evaluations to the standard in his or her mind. In terms of knowledge, making comparisons is associated with the conflict between new ideas and one's established knowledge, by which new understanding may be created. Continuously switching between making comparisons and passing judgements, the individual not

only realises the differences between his or her self-concept and the group identity, but also tries to find common ground to continue his or her comprehension. In this situation, the desire to be accepted by the group motivates the individual, so that the individual makes comparisons and tries to bring different experiences together. If the desire to be recognised is strong enough, the individual may try to gain group acceptance even if some common values are not very agreeable. The desire to be accepted then motivates the individual to sort out the conflicts between those varied views, so that the individual acquires new understandings through the process.

7.4.2 Judgement, Habit and Learning Patterns

This study also suggested that the individual has a criterion of judgement in his or her mind. According to Conner (1998:20) , '*when the existing base of knowledge is inadequate to address the issues at hand, new knowledge must be created*'. However, whether or not the new knowledge can be put into practice depends on one's criterion of judgement. The criterion of judgement implies the individual's attitude to and his or her understandings about the particular events. In other words, the criterion refers to the degree to which the individual is able to accept him- or herself. The criterion can also be viewed as a measurement base, which is formed by interaction with close others, similar others and relevant others. The individual relies on the criterion to justify his or her behaviour, to determine his or her actions, and also to explain the behaviour and actions.

Once the individual's judgement has been made, the results of the judgement may be put into practice so as to direct the individual's behaviour. If no conditions change, the solution will be adopted again and again in order to sort out similar problems. Unless affected by some external or internal impacts, the individual tends to form patterns of

solution in order to deal with similar issues. The influences of this sort of habit on knowledge creation are uncertain. Once the individual's responses are integrated into some patterns, the individual can quickly respond to particular stimuli. Because the individual has rehearsed the series of responses several times mentally or practically, the individual can produce relative solutions speedily in order to cope with the stimuli. In this situation, the rapid responses and relative solutions enable the individual to gain abundant information in a short time so as to facilitate knowledge creation.

However, the patterns of solution may hinder knowledge creation. Because the pattern derives from certain solutions to particular problems, particular responses have been highlighted in order to form certain ways of thinking and to perform certain behaviours. However, because situations are too changeable to control, a solution that is impeccable on the previous occasion may become inappropriate this time (Conner 1998:21). So, it is dangerous if members in a community rely on ready-made suggestions too much. On the other hand, the above reasoning also implies that some ways of thinking or behaving are mainstream, while others are peripheral. Rogers (2000:384-392) agrees that when communities try to establish a cohesive atmosphere, they often create a group of isolated learners. When people should work on their own, not only is the collaborative atmosphere diminished, but also the opinions from those isolated learners may be neglected. The mainstream responses are so popular that the peripheries are not very noticeable. However, the peripheries may be the key to creating another field of knowledge.

From the angle of knowledge and learning, one's motivation to learn may be triggered by gaining the group's recognition and acceptance. It can also be motivated by the process of making comparisons with one's peers. Making a comparison enables

individuals to notice the differences between themselves and others, which is a foundation of knowledge creation. Both elements are crucial, because they explain the reason why people start to learn and continue their learning. However, both analyses are still at the individual level. When people interact with their peers or others, varied elements can influence what they learn and why and how they learn it. Learning is, under such circumstances, shifting its roles between purpose and means, so people may understand or misunderstand more about themselves and the world where they are.

7.5 Building Interpersonal Networks

The following sections are designed to illustrate the coherence and interdependence between interpersonal networks and the concept of exchange. It will be argued that knowledge creation and patterns of practice cannot be separated from specific configuration and environment. Interpersonal interactions are viewed as a foundation of knowledge creation, which is also affected by interpersonal networks and forms and purposes of exchange. The concept of network implies the influence of an environment conducive to knowledge sharing. The concept of exchange underlines the impact on knowledge creation from the angle of marketing. The analysis indicates that the marketing view of exchange may dominate knowledge creation and the individual's participating in interaction may manipulate the market of knowledge.

Wiggins, Wiggins and Zanden (1997:224-227) suggest that the individual may try to learn criteria in order to determine his or her behaviour by making comparisons with peers. The peers which the individual compares him or herself with are parts of the individual's networks. Miell and Croghan (1996:272-273) classify interpersonal networks into three types: networks of significant others, exchange networks and

interactive networks. The network may be changed when the individual makes comparisons with members in the network. Festinger (1954:117-140) assumes that the individual's opinions or behaviour are affected by people who hold similar viewpoints. This, like attracts like, is the origin of the influence foundation. The individual tends to ally with people who have similar opinions, so that the interpersonal network among these people is strengthened. When different opinions emerge, arguments may occur and so erode the foundation of influence. This reflects the fact that the influence is based on shared views or interests (in both of the common senses of the word 'interest').

However, the influence of interpersonal relationships cannot be simplified as above. The influence is a result of ongoing interpersonal interactions that involve varied time, space and interactive objectives. Each element can directly or indirectly lead to a different result so that the influence is also diverse. For instance, Harary, Norman and Cartwright (1965) propose a mechanism which highlights the importance of environment in the influence of interpersonal relations. Marsden and Friedkin (1993:127-151) develop a formula to explain the process of the influence and suggest that one's behaviour or attitude will be affected by other members' behaviour and attitude.

7.5.1 The Influence of Interpersonal Relationships on Knowledge

From the angle of knowledge and learning, interpersonal networks, one of the forms of social capital, have influences on knowledge sharing. According to Fukuyama (2001:7), *'social capital is an instantiated informal norm that promotes co-operation between two or more individuals'*. From the angle of knowledge acquirement, social capital can be seen as a power to gain access to resources unavailable to others

(Llewellyn and Armistead 2000:226). From the angle of knowledge sharing, the concept of social capital assumes that leveraging levels of network ties and relationships is a way to accelerate knowledge dissemination (Nahapiet and Ghoshal 1998:243). Social capital is also helped by having a shared purpose, empowering policies and leadership that encourages dialogue, open communications and equal accesses to information. The concept not only points out the importance of networks and relationships but also gives an interpretation of the reason why the knowledge within the environment can be acquired and shared so effectively. Some scholars, such as Fafchamps and Minten (2002:173-206), suggest that social capital can be viewed as a 'stock' of trust that facilitates the provision of public goods. Grey and Garsten (2001:229-250) use the concept of 'trust' to explore some predictable relations in bureaucratic bodies. Scholars such as the above look at the question from different angles, but there seems to be a consensus that interpersonal networks are a form of social capital very conducive to the knowledge process and learning. For this study, I am not going to argue whether or not social capital can improve knowledge creation, but to examine how interpersonal networks interact with interpersonal exchange so as to influence the possibilities of knowledge creation.

7.5.2 Common Ground, Bridge and Exchange

An interpersonal network is a channel which facilitates the process of engaging in exchange. Some people provide other people with help, in order to gain the other people's help in return when necessary (Blau 1964:91). Some knowledge sharing is also available through interpersonal networks. Although interpersonal networks may derive from formal or informal interactions, both types of origin present a similar outline of their influences on knowledge sharing and creation.

One of the main functions of interpersonal networks in knowledge creation is that interpersonal networks can bridge different knowledge bases, and so lead to knowledge sharing and creating. This situation is similar to the common ground which I mentioned in Chapter 5. Knowledge is embedded in the individual, and different individuals have different knowledge cultivated within different contexts. In Chapter 5, I suggested that the bureaucracy in the TPG has created common ground which enables different people with different knowledge to share information effectively. Knowledge creation, in these circumstances, can also be developed through the commond ground by which different ideas can be juxtaposed on a common base to be compared. In that chapter, I focused on the influences of formal networks on knowledge and learning. No common ground, no base in which to cultivate a relationship. No relationship, no room to exchange knowledge from different domains. The main reason for establishing common ground is that different knowledge can be discussed where the domains overlap so as to stimulate sparks of new ideas.

Similarly, when informal networks have been well established, different individuals with different knowledge backgrounds may associate with each other. In this situation, not only can knowledge be developed fast among these networks, but also these interactions also facilitate interpersonal relations. I have already suggested, in previous chapters, that a common knowledge base provides individuals with opportunities for making comparisons. However, in many cases that have been discovered in the TPG, the main purpose of interacting with others is not to acquire knowledge but to strengthen interpersonal networks. It is these interpersonal networks that bring different knowledge domains together. In other words, the linkages between the different knowledge domains are based less on common knowledge ground, but more on interpersonal relations.

7.5.3 Interpersonal Relations Improve Interpersonal Exchange

In Chapter 5, Mr. S's idea about using interpersonal relations to gain help was introduced. How did he establish the networks? Why did he choose this method to build the relations? These questions may help us to rethink the relations between interpersonal networks and exchanges so as to show how the concept of knowledge creation and one's habit and practice have complementary things to offer.

When Mr. S was given extra tasks and needed his subordinates to share the burden with him, he faced a dilemma. He could not complete the tasks alone because they were too big to finish; he did not want to impose the extra work on subordinates because they would probably be reluctant to do the tasks and might feel unhappy if asked. He said, '*If they do things reluctantly, the tasks will not be done well*'. In order to make employees feel happy to share the problem, Mr. S used his wisdom to change the situation. He said, '*If you always take care of them and are concerned about their life, they will keep gratitude in their minds. They will give you a hand when you need it*'.

It seems that Mr. S's approach of establishing interpersonal networks is by the method of expressing his concern. He also offers his assistance when other colleagues need help. According to him, if a manager can usually help subordinates, the subordinates may help the manager in return when it is necessary. In this situation, it seems to Mr. S that helping others is for the purpose of gaining help some other day.

Mr. S's intention in helping colleagues is similar to Mr. W's helping Mr. X in Mr. W's group, but their effects are different. Mr. S's assistance leads to the other people

helping him in return, while Mr. W's help facilitates Mr. X's learning so that both Mr. W's and Mr. X's goals can be obtained. In this situation, Mr. S's conscious purpose in offering help is to obtain help from others, whereas Mr. W's purpose in giving help is to further co-operation within the department. Situations such as the above indicate that people try to establish good interpersonal networks in exchange for something they want.

The focus of the interactions seems strongly on engaging in exchanges, rather than on knowledge creation or sharing. In this situation, it seems that interpersonal networks are nothing to do with learning or knowledge, but the mechanism that people use to facilitate exchanges.

7.5.4 Interpersonal Exchange Strengthens Interpersonal Networks

Interpersonal networks will not only improve exchanges, but engaging in exchanges also strengthens networks. According to David (2002:H1-H7), dense social networks may facilitate some exchanges, such as know-how, norms and trust within the context of organisations. Good interpersonal networks here ensure that the networks can acquire and disseminate information quickly and the user can also anticipate the result of using the networks.

Although Ms. N's original purpose in maintaining the relations was to gain help from the interpersonal networks, the effect of exchanging help has been to improve the network. She said, '*Because we keep helping one another, we get along with each other. We still keep in touch often, even though I am not in the position of secretary any more.*' In this situation, her interpersonal networks seem to be strengthened by her frequent exchanges with friends. I am not sure how much knowledge process has been

involved in this cycle. It seems that the more exchanges people engage in, the closer relations they may have (the close relations can be either positive or negative).

The close relationship implies that the individual involves him or herself in the interactions a great deal. The more frequently the individual participates in interactions, the more learning he or she may experience (the learning can be either positive or negative). Therefore, interpersonal exchange improves interpersonal networks, and additionally one's participation facilitates the knowledge process for both sides of the interaction.

7.5.5 Networks Facilitate Knowing

Some scholars, such as David (2002:H1-H7), Andrew, Rob and Dean (2001:24-28), believe that networking interpersonal relationships may create possibilities for the emergence of a 'virtuous cycle' of knowing.

Useem (1982:199-226) observed the way executives used appointments and suggested that the chance to interact with people provided a vehicle for learning. David (2002) points out that interpersonal networks help individuals to obtain know-how quickly. In the TPG, Ms. N suggests that the fastest way to learn things in the TPG is to ask experienced colleagues. '*It is very useful if you can always keep a good relationship with your friends. For example, I was the secretary to the head of this institution so I got many chances to meet the people, not only in the organisation but also in other institutions. I was not very familiar with them but just kept in touch. As a result of our keeping in touch, they helped me a lot when I needed help*'. Ms. N's interpersonal networks enable her to acquire know-how quickly. This shows that networks facilitate knowledge sharing.

By contrast, Mr. L used his interpersonal networks to disseminate his complaints, which was also of benefit to constructing his understandings. It was Mr. L's bad formal relationship that facilitated his informal networks. Because he had a bad relationship with Mr. J, who was in charge of the department, Mr. L tried to tell other colleagues his suffering. The interpersonal network became a key, which released him from tension.

Through the interpersonal network, Mr. L disseminated his ideas and complaints among informal connections and in addition collected other members' views in return. Using this method, he identified his position in the group and understands how to survive in the organisation. In this situation, interpersonal networks provide chances for knowledge sharing and also enable the individual to understand him or herself more.

Through interpersonal networks, Mr. L discovered that Mr. K experienced similar suffering. He then knew that he was not the only person who felt unhappy with the system. According to Mr. L, many colleagues gave him suggestions and tried to comfort him. Finally, Mr. L summed up the relationship between himself and Mr. J in the comment: '*we are different individuals*'. The interpersonal network may not clarify a misunderstanding or reveal a reality, but it seems to become a tool by which the individual acquires information or contexts in order to construct his or her understanding. Although the reality may be objectively out there, the individual's understanding of the reality is subjectively interpreted by the individual him or herself. Those interpretations are based on digesting different knowledge sources that are shared through interpersonal networks.

The above reasoning seems to suggest that gaining knowledge is strongly related to interpersonal networks. Networks provide the individual not only with information (for example, the information in the documentary system) but also with knowledge of the context in which the information is embedded (for example, people's experience of how to do it).

7.5.6 Networks Diminish the Chance for Knowing

On the other hand, good interpersonal relations are not necessarily good for learning, because people may rely on ready-made knowledge too much and so ignore the chance for discovering new messages. For instance, Mr. S constructs his interpersonal networks by exchanging help. Some tasks may be done by his colleagues, so he has no chance to learn how to deal with the tasks. Mr. S may not detect that the learning opportunity has diminished or feel regret that the chance for learning has gone, because the main purpose of his interpersonal networks is for exchanging help rather than for learning. Because interpersonal networks are not necessarily built for creating knowledge and they are usually constructed in order to exchange help, good interpersonal networks may diminish the chance for knowledge creation.

Although a lot of learning does take place in the course of interaction between colleagues, the chances for and the directions of learning are still uncertain because interpersonal interactions are sometimes goal-oriented. A goal-oriented interaction so strengthens the purpose of the interaction that the individual neglects the additional chances for knowledge creation which develop fortuitously from the interaction process. When people such as Mr. S and Ms. N use interpersonal networks as a means to achieve a certain purpose, they may ignore the chances of learning which happen in

the process. Their aim is the solution of problems, and the quickest way to solve a problem is often to let the most experienced person do it rather than making sure that they have learnt how to do it. In this situation, the individual learns more about how to ask for help, but less about how to sort out problems.

7.5.7 What is Learnt during the Process of Interaction?

Learning is always there during the process of interaction, even though it may not be the main purpose of the interaction. According to Mr. S, he has learnt a lot about how to build a good connection with people, since he started to work. He also suggests that a good interpersonal relation is more important than professional knowledge, because the individual can learn his or her profession by interacting with colleagues if he or she has a good relationship with them.

We may agree that good networks open some opportunities not only for sharing knowledge, but also for acquiring knowledge. No matter whether or not the individual notices that he or she is learning something, knowledge may be created by the chances following the process of interpersonal interactions. However, the knowledge that the individual gains through the process may not necessarily be what the individual originally wanted. For example, Ms. Q generally uses her interpersonal networks to find some solutions to the problems of her work. Her original idea is to find solutions, which means learning how to deal with the situation. The data does not show how much knowledge she has gained through asking others. It is possible that she relies on others' solutions so much that she may not know how to solve the problem without asking for help.

By contrast, Ms. O found it difficult to deal with tasks when she entered the organisation because there was no archive of similar problems which she could refer to. Even though Ms. O's experience may be different from Ms. N's, Ms. N admitted that constructing a good interpersonal network was the only thing which has allowed her to become mature in her years of serving the public. According to May, Korczynski and Frenkel (2002:775-801), a combination of highly collaborative working relationships, rapidly changing working environment and the absence of proper documentation of the work process can often result in peer learning. The focus of Ms. N's learning seems more on how to establish good interpersonal networks, and less on how to achieve professional knowledge.

On the other hand, Mr. S gained professional knowledge through asking others. He said that he could learn what he wanted through interactions. However, that was a kind of problem-driven interaction. In the situation, Mr. S wanted to know how to sort out a problem. He actually knew that he was engaged in learning and the purpose of the interaction was for understanding something. Knowledge is, in this situation, a main product, rather than a by-product. This situation is different from the situation which was discussed in Ms. N's case.

In Mr. S's and Ms. N's cases, we may discover that during the process of interpersonal interactions, the individual is surrounded by abundant information, a situation which makes it possible to create new knowledge. Whether or not certain information can be transformed into knowledge seems to depend on one's attitude and habit. Networks provide the possibility of accessing information, which create the potentiality of knowledge creation, while the individual's attitude to learning directs the orientation and the process of knowledge creation. This situation will be discussed in Chapter 8.

7.6 Engaging in Exchanges

The following section is going to argue that the process of exchanging resources creates opportunities for developing powers in the organisation. Powers in the group highlight certain knowledge, so that a market in knowledge emerges.

There are many angles from which to view 'exchange'. Some scholars, such as Dixon (1997:23-24) and Drucker (1999:79), highlight the importance of the circumstances favourable to knowledge-exchanging and suggest that it may be necessary to merge routines and cultural norms into digital communities in order to strengthen the binding glue of knowledge sharing. Others, such as Nonaka and Takeuchi (1995), Tiwana and Bush (2001:242-248), underline the significance of the linkage between the individual and the organisation. They try to portray mechanisms which enable the individual to give to and receive from his or her peers' contributions. These studies view 'exchange' as an action and 'knowledge' as an objective or a result of the action. This angle focuses on knowledge sharing, which has been stressed in previous paragraphs. In the following sections, not only will I continue to adopt this approach to view the relationship between knowledge and exchange, but I will also try to integrate the concept of 'market' into the whole idea. I will then suggest that the individual may be able to affect the market in knowledge by way of his or her participation.

7.6.1 An Overview of Exchange

Almost every interaction is related to exchange. Mr. M helped his colleagues in order to obtain their future help. Mr. W taught Mr. X how to deal with official business so that Mr. X could quickly become familiar with the organisation so as to share Mr. W's heavy load of work. When Ms. N has lots of tasks to complete, her colleagues help her

spontaneously. It is Ms. N who has to take the responsibility, yet her colleagues do not hesitate but come to help her. According to Ms. N, *'This may be because I had helped them often when they needed help'*.

The more frequent the exchange, the more easily may the interpersonal relationships be established. From the angle of group dynamics, exchange not only profits both sides of the interaction, but also strengthens the interpersonal networks so as to improve group dynamics.

Exchange is a way to construct interpersonal relationships. Exchange exists because both sides of the interaction have their individual purposes. For example, Mr. M helps Mr. K in order to gain Mr. K's help in return. If the interaction of exchange is purely between the two people, the effect of exchange may be limited to the two sides and is less likely to improve group dynamics. For example, even though Ms. N uses her interpersonal networks to gain know-how to sort out her work problems, the relationship is only between the person who gives help and Ms. N herself. Ms. N has many interpersonal networks, yet each network is isolated from the others. This sort of network may be too scattered to be integrated into group dynamics.

7.6.2 Exchange is Centralised by the Distribution of the Group's Resources

However, if someone in the group has useful resources with the result that other people in the group are willing to make exchanges with the person, it is then possible to get members' powers together so as possibly to encourage a group dynamic.

We can now imagine that the group dynamic is formed by various interactions of giving and taking. These interactions can be scattered over the group, yet they can also

become very centralised. For example, Ms. M is thought of as a knowledgeable person and her experience of administration has been recognised. Her professional knowledge derives mostly from the experience of helping other colleagues. When the people who lack certain resources (such as Mr. F) ask for help and Ms. M can lend them a hand, Ms. M becomes a powerful person in their mind. Compared to Ms. M, who is giving the help, the people who need help are relatively weak at that moment. At that time, not only has Ms. M won her colleagues' respect, but also her advice becomes important for them. Because the interactions of giving and taking usually happened between Ms. M and other colleagues, she has acquired useful resources. In this situation, her ability to grasp resources and her plentiful opportunities for participating in interactions seem to make the distribution of resources in the group centralized. Because she has more resources than others, she is, in a way, more powerful than others.

7.6.3 Marketing Affects the Distribution of Resources and so Values knowledge

On the other hand, the power in a group is not necessarily determined by how much in the way of resources has been grasped, but by how useful the gained resources are. In other words, the power is also contingent on the market for the resource. If Ms. M's help is not what Mr. F requires, Ms. M's abundant resources cannot make her so powerful. If Ms. M's professional knowledge were not required by the organisation, she would not gain such praise from all over the group, because few people would have occasion to make an exchange with her.

Similarly, Mr. K graduated from National Chin-Hwa University, majoring in electrical engineering. Even though he was excellent in the subject, this expertise did not help him a bit in his work, which called for skill in administration, not in his degree subject.

This situation did not change until Mr. M, one of his colleagues, did his Master's degree. Mr. M needed Mr. K to teach him calculus and statistics and in return, he gave his advice on Mr. K's financial problems and interpersonal relationships with colleagues. Therefore, it is the demand for the knowledge that gives market value to the knowledge. Because the knowledge is valuable, people who acquire it have potential power in the group.

The above reasoning seems to suggest that people's interactions identify some useful resources, such as particular knowledge within the group. The useful resources also provide the holders with chances to access power. What needs to be asked, however, is: how does the power affect exchanges?

7.6.4 Exchange and Knowledge Market

The focus of the relationship between exchange and knowledge creation is, especially in this study, not only on the point that the process of exchange may create some chances to develop new understanding, but also on the fact that the individual may be able to manipulate the knowledge market so as to influence exchanges. The former implies that people may want to gain some resources from others in exchange for those they have. The latter highlights the importance of participation through which the individual may have the chance to direct exchanges. New knowledge may be constructed through the process of exchange. It may also be one of the objectives in the exchange. In some circumstances, the individual may try to promote the value of the knowledge he or she holds so as to improve knowledge exchange.

Based on the concept of exchange, each side of the interaction tries his or her best to promote the resource he or she has in exchange for the resource he or she wants. Two

thoughts in relation to knowledge and learning may arise: first, when the gaining of knowledge is the purpose of exchanges, what circumstances will best ensure that new knowledge will be fulfilled? Secondly, if the purpose of exchanges is not to acquire knowledge but to receive other resources, what influences will bear on knowledge creation?

If knowledge is the objective of exchanges, will people want to sharpen their professional knowledge (if the knowledge is valuable in the market) in order to attract others' notice? Not necessarily, especially under the circumstances of the TPG. People may want to strengthen their interpersonal networks so as to acquire more resources. Establishing a good channel for exchange does not mean that people deliberately make themselves more professional in order to increase the possibility of exchange. For example, Mr. S's interpersonal networks are well established in order to give and receive help. He deliberately helps others in order to receive others' help in return. However, he does not intentionally sharpen his knowledge or skills.

On the other hand, a well-developed network for exchange may facilitate knowledge acquisition. Ms. M's professional knowledge is improved because when she helps others, she has more opportunities for reflecting on and refining her own understanding – and even gaining new insights. According to her, she sharpened professional skills again and again, while she helped others. Her proficiency, then, enhances other people's desire to ask for help. Although she has been involved in a positive cycle of teaching and learning, her attitude to her professional development is still essentially passive because the initiative comes from other people asking her for help.

This market of exchange is different from the general market in goods. In general markets, products are priced. In order to sell their products, companies try to improve their products to make them more competitive in the market. However, interpersonal exchange is different from selling goods. In the first place, the objectives for interpersonal exchange are not exactly priced. Secondly, the market for exchange is less open than the market in goods.

7.6.4.1 About Exchange

The value of interpersonal exchanges cannot be estimated, because the objectives for these exchanges are not priced. The individual may have given little help before; yet the other may return a lot to him or her. A popular saying in Taiwan describes this situation: 'Receive a drop of favour; repay a gush of kindness'. From the angle of Economics, there is an analogy to be drawn with the varying relative prices of water and diamonds (Smith 1877:37). When the individual is in a desert, the price of a drop of water may be higher than that of a diamond. Giving a hand when necessary may be worthy of much return in the future. Nevertheless, because the decision of how much return should be repaid relies on how strong the individual's gratitude is and the intensity of the gratitude can easily be affected by ongoing interactions, the payback which the individual is going to give is uncertain.

Because the price of exchange cannot be objectively evaluated, some prefer to receive help rather than give assistance, while others like helping others but hesitate about being helped. Whatever the situation may be, people try their best to establish a good interpersonal network, rather than to promote their products in order to improve the possibilities of exchange. Because the price of exchange is uncertain, what concerns individuals is probably how much they can gain through the exchange. In order to

make sure that they can gain as much help as they want, they try their best to establish sound networks so that they can have more choices. In this situation, it may be less possible for them to sharpen their professional skills deliberately to attract requests for help. It is more possible that they work to establish relationships in order to acquire assistance.

7.6.4.2 Marketing

The market for interpersonal exchange is not really an open one, so people may not find it easy to get into the market and once they gain entry, they hardly ever leave it. Because the network is based on the individual's personal interactions with others, the individual's definition of his or her network (and way of using it) is very personalised. This situation is different from the market for goods in our daily life. Generally speaking, in the market for goods, exchange comes first, then the relationship. In the market of interpersonal exchange, the relationship comes first. Most cases in this study suggest this idea. For example, people in Ms. M's group trust her, so they are happy to exchange information with her. Similar cases have been introduced, such as Mr. S, Mr. K, Mr. L, Mr. X, Ms. O and Ms. N.

In this study, only Mr. M clearly suggested that he used the chance of interactions, without established relations, to explore possibilities of exchange. The reason for his doing so was that he tried to expand his interpersonal networks as widely as possible, in order to develop his future career (he also tried to involve himself in political circles in order to seek for possible resources). With this exception, most cases in this research seem to indicate that interpersonal networks are the foundation of exchange. The individual has to construct the interpersonal connection in advance, and then he or she can have the opportunity for exchange. Because the market is not open enough, it

is very possible that the resource which the individual holds will become monopolistic. In this situation, the individual does not need to pay attention to promoting the resource, because the market is always there.

Because the market is already in existence, the individual may not try to improve his or her professional knowledge in order to promote his or her 'products'. In the particular circumstances of the TPG, people may only want to gain resources to sort out problems. Engaging in exchanges or establishing interpersonal networks are both undertaken for this purpose. On this account, the individual's attitude to creating knowledge is passive because, when the immediate problem has been solved, the learning motivation fades. However, this is only when we confine ourselves to the aspect of seeking help, which is a very small part of the whole situation. Another important reason for engaging in interpersonal exchange is that people may want to gain power in order to achieve their personal goals. Based on this issue, the following sections will discuss the interactions between knowledge creation and exchange.

7.6.5 Power and Knowledge

The interactions between interpersonal networks and exchanges also underline the ongoing change of power in the group. Power cannot complete itself, it needs interactions to create and continue it (Fox 2000:853-867). Because it implies how much resource the individual is able to interact with, it is closely related to interpersonal networks and exchanges. The network is a resource itself and, furthermore, it helps the individual to engage in exchange. Having a good interpersonal network also means that the individual has more possibilities of solving problems and so is associated with power. Exchange is an activity of swapping resources, which implies the possibility of interactions. If a person holds a valuable

resource and others may also want to acquire it, some interactions or exchanges may happen. The person may then become popular as well as powerful.

Not every sort of knowledge can bring power for the individual. It depends on whether or not a market for the knowledge exists. In Mr. K's case, his knowledge of mathematics had no market until Mr. M asked for help. Therefore, knowledge is not necessarily equal to power. Only when the demand for the knowledge is available can the knowledge probably be converted into power. For instance, Ms. M's power derives from her professional knowledge, because the knowledge which she gains is required by the organisation. Therefore, power is a relative concept which is contingent on the interactions between the resource holder and those who need resources.

7.6.5.1 Using the Market

Since it is a relative concept, it is possible to obtain power through either the resource-holders' behaviour or the actions adopted by those who need resources. Those who need the resources may want to learn how and where to find them. For instance, Mr. M knows that Mr. K has the knowledge he wants, while Ms. N knows which friends can help her to sort out her work problems. The resource-holders may need to promote their knowledge in order to make it popular in the market. For example, Mr. R is known for his good behaviour and professional knowledge, because Mr. J promotes Mr. R's hero image.

Mr. M and Ms. N employ their interpersonal networks as common ground through which information and knowledge are shared within the networks. Mr. R takes advantage of the organisation's value system, which enables him to promote Mr. R's hero image so as to sell his ideas to the members in the group. By way of manipulating

the 'Hero' and the value system, Mr. J's ideas, including his criteria of judgement, can be clearly delivered to the members in the group.

7.6.5.2 Influencing the Market

On the other hand, people's participation provides individuals with opportunities for learning. Apparently, Mr. J stands back to manipulate his product and the market in order to promote the resource which he holds. Although Mr. J did not want to be involved in people's interactions, he still participated in the interactions in the group very much, because he was the one who created the value system with which every member in the group interacted. By contrast, Mr. W could not manipulate the tradition in his organisation, but could only participate in the tradition. Because of his participation, he could then have the opportunity to modify the tradition. For example, he devoted himself to the tradition of writing essays so that he re-created the vogue and stimulated Mr. N to sharpen his writing skills. Because Mr. W applied the writing skills to deal with official business, members in the group followed suit. Mr. N even applied the skills to write up his M.A. dissertation. Other members, such as Mr. X and Ms. O, also found practical uses in their official tasks for ideas which they had initially explored in writing essays.

Situations such as the above indicate that the original idea for writing essays was for competition and for publishing. The initial purpose has been changed because of Mr. W's participation. He brought his ideas to the 'tradition', so that the 'tradition' has become different from what it was before. People in the group can then find a new way of applying the knowledge or skills developed in essay writing. Accordingly, participation is an opportunity for Mr. W to redefine the domain of knowledge

expected in public servants at this level. Through participating in knowledge sharing, the market for knowledge can then be directed or created.

7.7 What do interpersonal networks and exchanges mean in terms of communities of practice?

Knowledge creation is an ongoing process that is tied to members' participation. Chwe (2000:1-16) suggests that people's participation in social networks may form a strong link which enables the community to form common knowledge. By participating in interactions, the individual constructs his or her interpersonal networks that are embedded in and sometimes conflict with the group identity. According to Brown and Duguid (1991:40-45), learning which derives from people's interactions is integrated into various communities of practice, by which the organisation is developed. Boland, Tenkasi (1995:350-372) and Pentland (1995:7) believe that organisations collect different communities of knowing and these professional specialities overlap and interact with each other. Apart from the angle of professional knowledge, Araujo (1998:317-336) views organisations as the systems which are intertwined by heterogeneous networks which bring social and material resources together.

7.7.1 Networks

Many scholars have discussed communities of practice in relation to the concept of networks. For instance, Brown and Duguid (1991:40-45) discuss the individual's learning and knowing in terms of intra-organisation networks, while Lundvall (1993:52-64) focuses on inter-community relationships that enable the organisation to trigger learning and innovation. Powell et al (1996:116-145) suggest that the development of formal and informal networks facilitates learning in groups. Araujo (1998:317-336) argues that learning and knowing reside in varied networks and are

based on social contexts. All of the above scholars regard cognition as situated and distributed and it is networks that bring these varied knowledge domains together.

Jarvis (2001:11) suggests that learning is not an isolated internal process, but the moulding of human essence embedded in social context through which human beings develop within their growing. It is also the social context that enables individuals to have motivation and guidance to trace the lost clues of reality (Thomas, Kellogg and Erickson 2001:866). Social context and established knowledge provide a base to judge which position the individual can take in order to fit him or herself in the process of networking. Every successful or satisfying experience of using the network fortifies the individual's trust in the exchange process. This process can then enable the cooperation between the persons involved to have a substantial foundation to develop, so as to make interpersonal networks more reliable.

On the other hand, the process of networking provides chances for sharing and renewing members' knowledge structures. This is not purely a matter of accepting stimuli and giving responses, but also discoursing with other knowledge sources and constructing new structures for each other. This process of integration implies a continuous course of knowledge re-construction. During the process, individuals keep interrogating, retrieving and reorganizing the established knowledge in order to mediate and diminish the conflicts derived from the process of exchange.

Thus, networking and knowing contribute to each other. Interpersonal networks become an integral part of acquiring knowledge, if people rely on the networks too much. In the end, people may not be able to sort out problems without gaining the knowledge through interpersonal networks. These networks are so important that

people may spend more time on establishing good connections rather than on sharpening their professional knowledge. When networks are well structured and if the quality of knowledge is not rigidly examined, the convenience of retrieving knowledge through networks may gradually be over stressed. People may then tend to import methods through others' help but neglect the importance of reflection.

7.7.2 Exchanges

Ardichvili, Page and Wentling (2003:65) believe that a community of practice allows members to exchange their knowledge, so that members can acquire solutions to sort out specific problems. Araujo (1998:317-336) argues that information exchanges that are regulated by written or unwritten rules provide members and the organisation with abundant resources so that learning and knowing in the organisation are developed. Brown and Duguid (1991:40-57) suggest that exchanging stories enables members to learn other members' experiences so a community of practice is similar to a repository of accumulated knowledge. Exchange is a way to construct interpersonal networks, while interpersonal networks facilitate exchanges. Through the interactions between networks and exchanges, certain knowledge will be highlighted and so the market in knowledge emerges. However the influence of exchange on knowing and learning is not as simple as the above. According to the findings in this research, the concept of exchange highlights the following issues.

Firstly, knowledge is not necessarily power. It depends on how big the market is. Because of the concepts of exchange and network, the individual plays an important role in the market. Not only does the market affect the individual, but also it is modified by the individual's participation.

Secondly, because the market can direct the orientation of knowledge creation so as to centralise the powers in the group, managers may use this concept as a management tool to manipulate the organisation. Some informal power centres in the group may also be formed by way of frequent interactions.

Considering the relationship between market and knowledge, people focus their learning on how to strengthen their interpersonal networks in order to acquire more resources through the networks. People also pay more attention to learning how to choose the right timing and right market in exchange for useful resources. They work out who are good sources of advice and help and deliberately build up good relationships with these sources. Equally, they are willing to "dump" relationships with people whose powers are in decline (Miell and Dallos 1996:282).

At the beginning of this chapter, I already justified why I described the four elements as "basic". The four elements – gaining group acceptance, making comparisons, establishing networks and engaging in exchanges – not only fundamentally trigger some influences on knowledge creation and sharing, but also contribute to members' mutual engagements in an organisation. However, the influences of these four elements on learning are still uncertain. The consequences of their interactions depend on some adjustment factors, including the individual's value system, his or her attitude to the interactions with colleagues and the nature of their task. For instance, being accepted by the group was important to Mr. N, yet it was not so significant to Mr. I. Gaining group acceptance could then trigger Mr. N's participating in activities, yet it had small influence on Mr. I's performances. Therefore, whether or not the common value in the group can affect the individual's behaviour depends on his or her value system.

One's value system is internal, yet one's behaviour is external. There must be something in between, which links these two things with each other. One's attitude to interactions is one of the linkages. One's attitude here includes not only the fact that one would like to disclose one's wishes to others, but also how the other people view these wishes. Although Mr. J wanted to use chats or discussions to ascertain employees' true feelings, his rigid attitude to tasks made people keep a distance from him. In this situation, even though he knew that taking part in activities was important to establishing good relationships with colleagues, he could not make it work in practice, because his basic authoritarian attitudes were at odds with his attempts to be friendly. Employees in the group did not recognise his definition of "soft", so his effort was in vain.

In the TPG, even though people may have a strong motivation to interact with others, the interactions are not necessarily successful. The loosely controlled supervision and the hierarchical bureaucracy make people in the environment have no will to care about others' business. In these circumstances, it is the official tasks that bring employees efforts together. In other words, the official business provides employees with common ground on which gaining group acceptance, making comparisons, establishing networks and engaging in exchanges become possible.

Situations such as this indicate that the influences of these elements and factors are uncertain. They depend upon each other. The four elements which are highlighted in this chapter provide a framework to construct an idea of how people learn from each other through their interactions. The three factors (one's attitude to interactions, one's value system and official tasks) modulate the influences derived from the interactions

between the four basic elements. The reason for my viewing the four as basic elements is that, compared with the three adjustment factors, the four features enable me to structure individuals' learning as a whole while the three factors determine the intensity of the basic ones.

Chapter 8

The Three Adjustment Factors

In the previous chapter, I used four elements (gaining group acceptance, making comparisons, establishing networks and engaging in exchange) to interpret complex social interactions. It seems that people's interactions become predictable as long as we can understand the causes of the four elements and efficiently control their interactions. However, the predictable parts are only a small part of social reality. Most interactions are unpredictable, because these social behaviours are determined by the individual's internal situation. In this chapter, I aim to explore some factors that influence the four basic elements so as to make their effect unpredictable. Three keys that embrace one's value system, official business and one's attitude to interactions will be introduced. As in the previous chapters, some stories that are extracted from research interviews will be used in order to strengthen the argument.

According to the previous analysis, both the processes of making comparisons and gaining the group's acceptance lead to a conflict between self-expectation and the judgement passed by others. In order to fit themselves into the environment, people try to adjust themselves to changes and also rely on their judgement to identify their positions within the circumstances. Through adjusting themselves and identifying positions, people can then not only understand the world, but also reveal their own view of the world (Lawrence 2000:2-3). This process, which is based on making comparisons and pursuing identity, implies interactions between the individual and the environment (Vogler 2000:22). Looking at the interactions, interpersonal networks become a foundation where social exchange is fostered. I argued in the previous chapter that interpersonal networks reinforce social exchange, so the concept of the market emerges and this affects the direction and results of knowledge creation. The

four concepts (comparison, identity, interpersonal network and exchange) are determined by a complicated process that is associated with one's judgement, habit, participation and practice. This process has been analysed in previous chapters. The reasoning above is based on the view that social phenomena are explicable, which means that the world where we live can be explained by us, who are affected by the world. This view provides us at least with a stable and coherent view of social phenomena (Aronson 1999:156-157), so that the chaotic reality can be approached bit by bit.

The four elements seem to contribute to one another, so that a complementary system is established. However, the system cannot complete itself, it needs some catalysts to make it work. There might be other stimuli waiting for the individual to respond to, yet he or she only chooses certain ones to interact with. For instance, Mr. N worried about whether or not he might fall behind his colleagues when he had just entered the organisation. Why did he determine to deal with certain stimuli, but to ignore others? This question is related to the topic of one's value system – why does the individual choose particular things to do and particular knowledge sources to interact with? This question highlights the importance of one's value system.

Apart from interacting with colleagues, people in an organisation also interact with official business. The official business in the particular environment of the TPG provides the organisation with a sharing ground by which people with different ideas may exchange their opinions. In order to deal with their official business, people communicate with each other, so that interactions between the four elements start to be triggered. Without an appropriate sharing ground, the four basic elements cannot interact well with each other.

Although a person's value system may enable the individual to select particular interactions and the official business provides him or her with common ground to exchange different ideas, neither item can guarantee the result of interactions. Some influences on interactions depend on other people's interpretation of the individual's behaviour. According to the data of this research, other people's evaluation of the individual's attitude determines whether or not other people will be pleased to communicate with the individual. In other words, a negative evaluation of one's attitude may cause interactions to be interrupted, twisted, or even be stopped at the beginning. Accordingly, other people's views about one's attitude to interactions cannot be absent from this particular issue.

The three factors - one's value system, official business and the evaluation of one's attitude to interactions - form an adjustment system. The concept of one's value system highlights one's internal motivation, while the evaluation of one's attitude focuses on the responses to one's external presentations. Official business is a bridge that juxtaposes participants' ideas and responses and enables individuals to make comparisons and to exchange resources with each other. These three factors will be discussed further in the following sections.

8.1 One's Value System

The concept of one's value system embraces, in this study, one's goals, expectations, honour and responsibility. In other words, this is the system which makes individuals feel important in connection with particular events. I am going to argue that one's value system is not fixed, but sometimes fluctuates. This focus of this topic is not only

on exploring one's feeling of importance, but also on the influence of one's value system on the four basic elements.

Because one's value system is contingent on situations, in different circumstances, based on different interactions, one has different expectations. In order to achieve these expectations, the individual tries to find solutions to ease tensions and to satisfy requirements. New understandings may be acquired and new structures of knowledge may come out during the process of searching for solutions. In this situation, one's feeling of importance restructures one's established knowledge, and the refreshed knowledge then becomes a foundation for passing judgement. Mr. M concluded that the interpersonal network was his most important asset, because he had gained some benefit by using it. Owing to the downsizing situation, he realised the importance of his future. He tried to establish interpersonal networks in order to further his career. One's feeling of importance seems to determine what to do and how to do it, which also reflects one's judgement and learning direction.

On the other hand, this feeling does not only affect one's judgement, but also creates chances for re-examining one's practice. When different individual value systems are juxtaposed, people may reflect on themselves and learn from other peoples' value systems. For instance, in Ms. M's group, people know what a public servant should do; yet they choose ways of doing things which are convenient to them rather than those they ought to do. Ms. M's insistence on her proposal made her colleagues reflect on themselves, even though we do not know whether or not their reflections led to any changes. This situation shows that one's behaviour does not necessarily follow one's judgement. Because the individual's feeling of importance is shifting and is contingent on different situations, different perceptions of importance in one's mind may conflict

with each other, especially when the individual is forced to choose certain roles to play on particular occasions. Because the perception of importance is not absolute and can change from situation to situation, other people's values of importance can then trigger the individual to reflect on his or her performances.

8.1.1.One's Value, One's Action and their Influences on Interactions

Ms. M's sense of responsibility and honour is one of the reasons for her being popular in the group. This is also the motivation by which Ms. M keeps helping others and thus improves her professional knowledge. Her sense of responsibility and honour influences her in two ways. First, this sense is one of Ms. M's feelings of importance, which enables her to keep moving toward certain directions. Secondly, even though the sense may derive from her personality or her personal history, it possibly affects other members in the group so that the group dynamics are triggered.

8.1.1.1 Keeping the individual moving toward certain directions

Based on the desire to be accepted and the process of making comparisons, one's scale of values is a key that rationally directs one's behaviour and learning. The scale of values derives from interactions between one's making comparisons and pursuing group acceptance. In Ms. M's group, interviewees such as Ms. L., Ms. K and Mr. F seem to compare themselves to Ms. M and acknowledge her superiority. This situation is similar to Mr. N's and Mr. X's making comparisons with other members in Mr. W's group. Both of the cases show that people in groups tend to compare their personal situations with those of others. This also implies that the results of the comparison may be important to the people in both of the groups. What are the important things for them? Mr. N's comparison was because he did not want to become an outsider, so his desire to be accepted was a strong motive pushing him to work efficiently. It seems to

him that he tries to adjust his self-identity to the group identity. Mr. X felt ashamed if he asked for overtime pay. It seems that in his case it is his perception of the group identity that prompts him to compare himself to others. This seems to echo Humphreys and Brown's (2002:929) idea that '*individual and collective identities are constituted within discursive regimes*'. The process of discourse provides both sides of interactions with symbolic resources so that members may identify with each other and keep interacting (Reed and Barkowski 2000:398). The identity issues such as the above seem to be important to the individuals.

8.1.1.2 Influencing other members in the group

On the other hand, not all behaviour is completely rational. Ms. M's colleagues compared her attitude to serving the public with their own. They recognised that her attitude was superior to theirs and consequently felt ashamed; but they admitted, in interviews, that they did not try to imitate her "more excellent way" of doing things. Why not? This was partly a rational decision, based on their judgement that imitating her could be costly in career terms, and partly the result of sheer habit and inertia. Individuals' value systems do not necessarily prompt any actions, because their judgement and habit determine what they do (and how and when they do it). So, people cannot make their decisions following their value systems all the time. When they participate in group activities, some important issues which have been ignored may be retrieved and so make them reflect on their own practice. This process , in my view, is similar towhat Reynolds (1998:183) refers to as 'critical reflection', because the reflection had made employees re-examine structures they took for granted. They were shocked by Ms. M's brave stand, so they reflected on their own attitudes to tasks and also identified the most important attitude of being a public servant. However, this sort of reflection did not involve Ms. M's colleagues (e.g. Ms. L., Ms. K and Mr. I) in

obvious behaviour changes, because they may have already weighted gains and losses before they act.

One's scale of values may be recalled by means of participation. Although practice and habit may interact with each other and so affect one's judgement, the individual may re-examine, through participation, his or her habit and practice based on making comparisons. This process also contributes to the established knowledge so that one's judgement is reformed.

8.1.2 One's Value System Triggers Learning

The main purpose of Ms. M's helping colleagues is, according to her, to contribute her knowledge to the public at large. Offering a good service to the public is what Ms. M thinks of as a public servant's duty and honour. Her conscientious attitude to work made her more absorbed in her tasks, which also enabled her to gain more professional knowledge. Because of her sense of honour, Ms. M helps her colleagues. In order to help others, she tries to expand and sharpen her professional knowledge. By the process of helping people, she gets to know more about other people's work and also improves her own expertise. Thus, it is the important sense of serving the public which leads her to make efforts and so create some opportunities for learning.

8.1.2.1 Broadening Knowledge by Helping Others

Because of Ms. M's strong desire to serve the public, she is pleased to give a hand to colleagues when necessary. She is acknowledged as a knowledgeable and helpful person. However, her abundant knowledge and her pleasure in helping others seem to complement each other. Since she pays attention to her job, she gains not only professional knowledge but also administrative knowledge from her official business.

The administrative knowledge, which includes how to establish interpersonal networks, how to expedite official business and so on, becomes common ground that enables Ms. M to explore other people's professional knowledge. Helping others, she knows more about other people's professions, which enables her to grasp the whole situation rapidly and also strengthens her understanding of other professional knowledge. In this situation, she does not intend to acquire some professional knowledge, but she has learnt something eventually.

8.1.2.2 Helping others strengthens one's interpersonal networks

Because the idea of serving the public has been valued, in order to achieve the purpose individuals participate in interactions and acquire varied knowledge during the process (Rogers 2000:384-392), and their interpersonal networks are also strengthened. In Ms. M's case, I believe that she has gained more than she herself can imagine. For instance, she might have understood more about how to deal with interpersonal relations, because whatever the situation might be, she was always popular in the organisation. In addition, she had also sharpened her skills in using resources, because some of the help she gave to colleagues was not direct but took the form of referring them to people who could provide the concrete help they needed. Learning such as the above might be unconscious and she did not clearly define those experiences as learning.

However, Cross and Prusak (2002:108) suggest that central connectors may end up in creating bottlenecks that can hold back the informal network. They argue that central connectors may be so demanded that they become too busy to perform their work efficiently. In the end, the informal network may then be destroyed. Cross and Prusak's suggestion seems not to fit Ms. M's case. Because Ms. M believes that

helping colleagues is also a kind of way to offer her services to the public, her role of central connector keeps developing and her knowledge is gained unintentionally.

8.1.3 Marketing One's Value System

The way Ms. M lives out her value system not only increases her chances for gaining knowledge, but also enables her to win other colleagues' respect. Because she insists on doing the right thing, the public's benefit is a top priority for her. This is the reason why she does not mind running the risk of having her proposal rejected but insists on her idea of justice. In this situation, her value system seems to direct her behaviour and also to challenge the whole system. This not only implies that one's self-expectation conflicts with the group identity, but also shows that one's behaviour in the organisation is infectious.

8.1.3.1 Winning Members' Respect

Even though she was rejected, she won colleagues' respect in the end. Because her insistence on the task is right and additionally few people have the courage to risk being rejected, her attitude to work is respected by members of the group. This situation seems to mirror Holmqvist's (1999:435) argument that reflective activities may enable members in the group to reflect on their held assumptions. This contagious situation of group dynamics means that people in the group can be affected or be directed by some logic. Cases such as the above suggest that some events arouse echoes in members' hearts, so that influence accumulates round certain individuals.

On the other hand, it is not always the case that insisting on the individual's value system can win others' respect. For instance, Mr. I did not want other colleagues to give him suggestions, because he thought that a public servant should be independent

in dealing with official business. In this situation, supervisors often rejected his proposals. He also admitted that his interpersonal relationships were not very good in the organisation, because other colleagues thought that his methods were different from theirs. Mr. I's proposals are based on his sense of responsibility and his honour in being a public servant. This situation is actually similar to Ms. M's insistence on her proposal. However, the results of both of the cases are different. Ms. M has won her colleagues' respect, yet Mr. I has become an outsider in the group. Both of them deal with their official business in a way which is inspired by a sense of responsibility. Why should similar motivations lead to such different outcomes?

8.1.3.2 Working interpersonal networks

We can explain the situation from the angle of marketing. The biggest difference between the cases is that Mr. I did not often discuss his official business with his colleagues, yet Ms. M did. Although this may be only a small thing, a small thing can be the key which makes the individual become isolated from the group. In the TPG, people spend most of their time dealing with official business, so the official business becomes an important factor which affects the individual's practice, habit, and interpersonal networks. If a person's attitude to the official business is very independent, his or her interpersonal relations may become closed. It is recognised that Ms. M has good interpersonal relations with colleagues, but Mr. I does not.

Ms. M gets along with her colleagues all the time. Not only do her colleagues respect her, but also her supervisors recognise the value of her performance. Her interpersonal networks and exchanges have been well established. It seems to me that she has a good stage on which to play her role. Within a well-established market, other colleagues fix their eyes upon Ms. M's ideas so that Ms. M's case can evoke their reflection. On the

other hand, Mr. I has no ready-made interpersonal relationships to highlight his noble ideas. Because, in his colleagues' mind, he is viewed as an outsider, his performance is often questioned. Not only can he not win colleagues' respect, but also some of his good ideas have no way of getting into the organisation.

Therefore, even though knowledge may be able to be created through certain interactions, the most effective way to get one's knowledge accepted is through the process of marketing. Without the market, knowledge has little ground to highlight its value so that the power of the knowledge is unnoticeable. When the power of the knowledge, the effect of the knowledge, is inconspicuous, the chance for re-using the knowledge is diminished. This may hinder the possibility of continuously developing the knowledge.

8.1.3.3 The idea of marketing

Ms. M's ideas or her sense of responsibility are not necessarily better than Mr. I's. However, because she has the market to sell the idea, not only is her experience transferred into her own knowledge base, but it also triggers other colleagues' introspection. This introspection then promotes Ms. M's status in the group. It seems to me that a positive knowledge cycle has been established. Her idea is noticed by the market, so the market reinforces the value of the idea. The idea can then be put into practice and so has more chance of producing other new ideas. Therefore, the influence of the value system (identity and comparison) on knowledge creation cannot complete itself. It needs a market (networks and exchanges) to highlight its value. Since the knowledge which Ms. M holds is circulated in the market, Ms. M gains influence unintentionally.

8.1.4 What does One's Value System Mean with respect to Communities of Practice?

One's value system seems strongly related to the four elements of people's interactions which I mentioned in Chapter 7. The value system is, in a way, a key which determines how well the four features develop. From the angle of the individual, Ms. M's case indicates that the individual's feeling of importance may direct his or her behaviour and also affect his or her means of achieving resources.

8.1.4.1 Participation Has Value to the Individual

This situation is similar to the practice in a community of practice in that participating in interactions has value to the individual (Peile and Briner 2001:396-403). In other words, one's value system is a motivation which triggers and continues one's particular actions in a group. Because the participation provides a high value to Ms. M, she herself constructs particular interpersonal networks that will not disappear with the end of certain tasks. The informal network is, in my opinion, a key for a team to become a community of practice (Hildreth, Kimble and Wright 2000:27) . Ms. M's case seems to show a loose community of practice.

From the angle of the group level, one's value system, such as the sense of responsibility and honour, may touch other members in the group. This situation is because people in the group have developed "*a sense of empathy around common trials and tribulations*". (Lesser and Storck 2001:831-842). This enables them to exchange their tacit knowledge and to reflect on their own value systems. When an individual's behaviour is acknowledged as outstanding and other participants recognise that they themselves cannot reach such high standards, the exceptional performer may become an informal leader respected by other members (Wilbon 1997).

8.1.4.2 The Concept of Marketing and the Idea of Legitimating Peripheral Participation

Other members' acknowledgement is important, because it shows whether or not the behaviour or idea has a market to sell. The idea of the market is not highlighted in the concept of CoPs, but the idea of legitimating peripheral participation (LPP) actually indicates how the idea of marketing works in a community of practice. In the concept of LPP, newcomers experience certain tasks in relation to the practice of the community. Over time, novices are gradually accepted by the community (Hildreth, Kimble and Wright 2000:27).

Some scholars, such as Grey and Garsten (2001:229-250), use the word 'trust' to describe this situation. By way of 'trust' the existence of predictability within an organisation will emerge. Lesser and Storck (20001:831-842) suggest that the feeling of trust resident in communities of practice and people's interactions with each other can be viewed as an engine for developing social capital. Because the idea of 'trust' or 'social capital' is rather abstract and hard to evaluate, I prefer using both ideas, of interpersonal network and exchange, to illuminate the concept of market. The process of LPP is, in my opinion, for the purpose of unifying different value systems. This is also an opportunity to sell members' value systems to the community. Through the idea of marketing, the individual's value system can gradually be accepted by the group, and so become a part of the group identity. Once the identity is formed, power follows after. The power does not only expel different opinions, but also isolates outsiders.

8.1.4.3 Being Accepted, Making Comparisons and Mixing up Value Systems

The above situation echoes Gherardi and Nicolini's (2000:7-19) idea that "*relations are created around activities, and activities take shape through the social relations and experiences of those who perform them so that knowledge and skills become part of individual identity and find their collocation in the community*" In this study, I suggest that because people identify their position in the community, they will compare themselves with the other participants. Making the comparison, people try not to fall behind so that their actions are directed and their value systems are gradually influenced. When the individual's performance that derives from a higher rank of the common value, such as the sense of honour, and this performance is achievable, other members may try to imitate the performance or to compete with one another to become excellent.

A person's value system, such as the sense of responsibility and honour, can be triggered and be supported by the individual him- or herself. However, it can also be encouraged through colleagues' or supervisors' support, or even reinforced by the organisational value system. Through formal or informal networks, the individual's value may become popular throughout the community. Other support will then strengthen the particular value.

A strong value in an organisation may be too popular to invite new ideas. This situation is not absolutely hopeless. Mr. I's story indicates that his attitude to dealing with official business may be one of the keys that make him an outsider. Mr. W used participation to change the tradition, and the participation is based on discussing official business. Mr. M usually has a chat with colleagues under the pretext of dealing with official business. The official business (as will be introduced in the next section)

seems to become common ground to explore and merge different ideas. It also provides many chances for associating individual intelligence with group dynamics.

8.2 Official Business

This section explores the influence of official business, by which the knowledge embedded in the individual may be integrated into organisational operations. In contrast to Wenger's (1998) idea, I emphasise the importance of such formal linkages and their non-linear evolutionary character. Formal linkages such as official business integrate informal activities, such as making comparisons, gaining acceptance, establishing interpersonal networks and engaging in exchanges. They also include different forms and trajectories of integration which convert individual efforts into organisational knowledge. I begin with an examination of the individual level of official business in some detail, considering its influences on the four elements that I have mentioned in previous chapters. Based on the influences, I then focus on the way official business can contribute to knowledge creation and the linkage between the two levels of official business (individual and organisational). I then turn to the organisational level in more detail and consider how this perspective, in my view, encompasses and enriches the individual level of the knowledge process and significantly increases the uncertainty of knowledge creation.

In the previous section, one's value system and consequent goals were highlighted. Actually, the concept of goal is always a significant topic in motivation theories. Many scholars identify goals, outcomes or the expectation for desired results as the incentives of motivation. Chung (1999:187-197) is one of few researchers who emphasizes the importance of the power of the work process itself. Because the motivation which comes from a result-oriented source, such as desired outcomes or the

expectation for gaining rewards, usually diminishes quickly, he suggests that the process of work itself can be viewed as an incentive that continuously triggers the individual's motivation. The work process in his opinion implies that the individual thinks, feels, learns and so on and is more than a cog in a machine. In other words, he views the work process as a mental process that is able to activate the individual's mental situation.

For workers, official business is what they have to face every day, and it is part of their daily life. In the TPG, because of its particular culture and system, the employees' life in the work place is closer to their life at home than that of workers in the private sector. For example, some can go shopping for a while if their supervisors agree (Mr. F, Ms. G); some are allowed to read a newspaper and to have some chitchat if they can finish their work in time (Mr. M). Although descriptions such as the above seem to indicate that public servants' life in Taiwan is rather free and at leisure, their life is also disciplined by organisational routines which have a governed structure (and have been introduced in Chapter 4). The governed structure also assigns employees to certain positions in order to take on fixed official duties.

Official business is a term that derived from interviewees' conversations. This is the term that they used, in the work place, to describe their tasks. I apply this term in this thesis in order to identify the particular context of the organisation. In order to complete their official business, employees have to understand what their colleagues have done. This provides employees with opportunities to interact with each other. In other words, official business brings members' efforts together and triggers the interactions between different knowledge bases. This echoes what Wenger (1998) refers to as a 'knowledge domain'. Because of the domain of knowledge, people have

common topics to discuss so that knowledge sharing and creation may occur. The domain may ensure the quality of knowledge sharing, because members are interested in improving the particular knowledge. However, the domain cannot guarantee how often these mutual engagements may happen, because people in informal communities may easily cease their interactions due to some influences from formal systems. By contrast, official business in the TPG provides employees with opportunities to interact with each other continuously. This factor ensures how often members' mutual engagement may occur so as to adjust the influence of the four basic elements.

8.2.1 Common Ground for Exchanging and Creating Knowledge

Even though most interviewees agreed that their official business was not difficult at all, some still believed that it was not easy to complete their tasks perfectly. Whether the task is easy or not depends on one's internal feelings about the task as well as on one's interactions with external situations. For example, Ms. P thought that her work loads were too high, yet one of her colleagues, Ms. Q, thought that all the tasks were equally assigned to employees in the department and people's work loads were acceptable. It seems to me that people view a common event from different angles. No matter what angle they may adopt, the common event (official business) becomes a catalyst to promote varied ideas during the process of interaction. However, even though official business may be one of the catalysts for creating knowledge, the process of knowledge creation can take place even if people in the group are not consciously seeking it. When the official business becomes a crucial event for the individual, the individual may then start constructing his or her understanding about the event and also exploring the world related to the events (the concept of the individual's value system was introduced in the previous sector). The above situation seems to indicate that official business is also a key which enables the individual to

express his or her views in the group and so trigger a growth of knowledge, either in the individual or in the organisation (or both).

8.2.1.1 The Official Business Links Members' Efforts Together

The official business becomes a connection that enables knowledge to be constructed by way of people's interactions. The interaction between Mr. W and Mr. X enables me to understand the relation.

The interactions between Mr. W and Mr. X started from Mr. W's actively giving some help. Mr. W showed Mr. X how to deal with tasks when Mr. X had just entered the organisation. At that moment, their interpersonal network started establishing itself. However, Mr. W's offer is not one of help with no strings attached. He hopes that Mr. X can quickly become acquainted with the environment and the tasks so as to contribute to the organisation. Thus, Mr. W seems to bear the exchange purpose in his mind. However, the purpose of understanding tasks quickly was just what Mr. X wanted to achieve. In this situation, Mr. W has his own personal motives for offering help, even though his purposes may coincide with Mr. X's. Mr. X demands help, while Mr. W offers the assistance. The exchange develops through established networks. This situation echoes Fafchamps and Minten's (2002:173-206) study showing that social networks enable both sides of interactions to deal with each other in a more trustworthy manner by some exchanges. Since both Mr. W and Mr. X have a similar purpose, which is to comprehend the official business as soon as possible, the official business has become common ground to draw the efforts of both of them together so as to start their interactions.

Situations such as the above imply that official business may open channels which allow the organisation to blend different ideas into its operations. This situation reflects, in my opinion, what Wenger, McDermott and Snyder (2002:29-32) refer to as a 'domain' in the communities of practice. Since people in the community discuss particular knowledge, the knowledge domain becomes a leverage point that not only sharpens individuals' understandings, but also increases possibilities of knowledge creation. The function of the knowledge domain is similar to official business, which both provide topics to elicit further interactions. Through these interactions, the community as a whole may start engaging in knowledge activities as well as innovative learning.

8.2.1.2 Common Ground can Facilitate Knowledge Creation

Because official business provides individuals with common ground to exchange their knowledge, knowledge may be acquired through the process of helping others. When a newcomer has just entered the organisation, supervisors may be pleased to tell them what to do and to teach them how to do it, because they have, in a way, the same purpose. In this situation, both the supervisors and newcomers start their interactions and experience their learning processes. For newcomers, they gain the professional knowledge directly from their supervisors' teaching. For the supervisors, they sharpen their skills of facilitating subordinates' learning and, in addition, understand more about the professional knowledge through the interactions. Ms. M's experience is an example of both the facilitator and the learner gaining new understandings though the process of teaching.

Because dealing with official business is the essential part of life in the TPG, teaching newcomers to deal with tasks is a general experience for supervisors. According to the

interviews, all the supervisors who were recruited agreed that they had had the experience of teaching newcomers. Only 3 subordinate interviewees out of 31 had not received help from their supervisors when they entered the service. The reason for the three people's learning by self-teaching was that when they joined the department there was no one experienced available to whom they could be assigned.

8.2.1.3 Common Ground may not necessarily Create Knowledge

Situations such as the above seem to highlight the fact that seeking common ground is a foundation of knowledge creation. However, the concept of common ground is not sufficient to ensure by itself that useful learning takes place. This is also a relative concept, which means that the function of the common ground can be effective only in certain conditions.

Because official business offers plenty of chances for interacting with people, interpersonal networks may easily be established through helping colleagues sort out work problems. Some interviewees, such as Mr. M and Mr. S, use official business as a means to interact with colleagues, so that they can establish their interpersonal networks in order to further exchanges. Official business is common ground that establishes connections and brings different resources together.

However, it is not automatic that making common ground will lead to creating a new understanding. Within an environment where group power is directed in certain ways, certain types of knowledge may be emphasised, yet some may be ignored. For example, Mr. L and Mr. K are able to express their opinions freely in Mr. J's group, but their opinions of dealing with tasks are routinely sidelined. Although the group has been well directed (the efficiency of the group is applauded), certain voices are

disregarded. The power of the value system is too strong to be affected, even though Mr. L and Mr. K have good interpersonal networks. In the previous section, Mr. I's and Ms. M's stories indicate that having good interpersonal networks may avoid them being isolated. Mr. L's and Mr. K's situations are different from Mr. I's experience, yet their results are the same.

8.2.2 Knowledge Storing and Retrieving

8.2.2.1 Archive System

Official business is not only a topic which evokes people's opinions or attracts members' notice, but also a substantial event which can be recorded as an archive and be stored in the organisation. In the TPG, every item of official business has to be formally recorded, because it is either related to the government's policy or associated with the public's benefit. This idea is similar to some concepts which are mentioned in Knowledge Management. In order to keep the knowledge which derives from organisational daily operations, some scholars such as Herschel, Nemati and Steiger (2001:107-116), and Holmqvist (1999:435) suggest some mechanisms (documentary system or organisational culture) which enable the organisation to transform tacit knowledge into an explicit form. Although the idea of building the archive system in the TPG does not derive from the concept of Knowledge Management, the system has analogous functions.

8.2.2.2 Experiences of Using the Archive System

Although people may have different methods of learning, most interviewees (31 out of 42) agree that following and revising previous workers' approaches are general methods for a novice to become familiar with the new environment. Some suggest that they can create their own solutions through studying other people's work.

Ms. P failed several times in writing up archives when she began her career. Her supervisor suggested she imitate her predecessor's work. By this method, Ms. P found her way out. Up to now, she still believes that the archive system provides newcomers with valuable clues which enable the individual to explore the whole situation. By contrast, Ms. O. felt awful when she recalled her experience of adjusting herself to the TPG. She was assigned to undertaking a new task which had no archive for reference. Since she was a novice in the TPG, she had no connections to ask for help. She tried her best to establish her interpersonal networks, and at the same time, she had to improve her professional knowledge as soon as possible. Being isolated from the group, she was blamed several times, cried several times and rebuilt herself several times.

Both these stories seem to imply that the archive is important to public servants in the TPG. The individual can gain the resource from either the archive system or interpersonal networks. Some tasks that had never been done before rely on interpersonal networks very much. This fact also echoes Ms. N's experience.

8.2.3 Official Business, Routines and Attitude

8.2.3.1 Acceptable Performance

A situation such as the above also indicates that the operation of the public sector is strongly affected by organisational routines. In the public sector, employees' working conditions are governed by firm regulations. Since the supervisors do not have enough authority to provide employees with incentives when necessary, individuals in the organisation have few inducements to improve their performance. There is no need for them to make their performance better. Accordingly, they may prefer to complete tasks

with an acceptable performance rather than strive for excellence. Such being the case, acceptable solutions inevitably turn into routines.

8.2.3.2 Relying on Routines, and Being Destroyed by this

Since employees have no motivation to revise their performance, they keep following organisational routines so that they become more and more proficient at them yet less skilled in developing new ideas. In other words, employees in this situation have become so used to the routines that routines become indispensable to them. This phenomenon can probably explain why some public servants have no will to change their career by moving to the private sector. For example, Mr. P admitted that he would keep in the public sector in the future even though he did not like the rigid system. One of his reasons for making this decision was that he was used to the life style and he had no confidence in his ability to work in a competitive environment. Mr. J and Mr. O recognized that their competence has been worn away by doing routines.

8.2.3.3 The Influences of Routines on Learning

It had been about 15 years since Mr. J and Mr. O got into the public system, so they had not really sharpened their skills to fight for life. Examples such as the above seem to demonstrate that individual learning can be affected easily by organisational routines. Anderson (1996:98) provides a similar example showing that excessive use of standardisation may constrain innovation because people may be used to avoiding dealing with certain information.

Some opposite examples have been discovered, such as Ms. N' idea that routines gave chances for rethinking; Ms. O believed that people could keep learning in a routine environment, as long as they were happy to pay more attention to those routines.

Reviewing their ideas, it is still difficult to judge whether or not organisational routines are good for organisational development. Nevertheless, it seems not that the routine traps the individual to become deskilled but that the influences which derive from routine lead the person to develop his or her learning habits so as to trap the individual in a vicious cycle.

In chapter 5, I have already shown some positive and negative influences of routines on knowledge creation. Ms. O also points out that the individual's attitude to routines is the key which determines whether or not organisational routines can affect one's performances. The issue of attitude will be introduced in the next section.

8.2.4 What does Official Business Mean with respect to Communities of Practice?

Liedtka (1999:5-17) views work as central to a community of practice, because the shared meanings which a community relies on are bound up with doing. In this section, I examine the concept that official business in organisations can be conceptualised as a role negotiated between individuals, their supervisors and the environment where they are. Based on behaviours and resources that constrain or facilitate learning opportunities, individuals in organisations complete official business and so experience knowledge processes. In this situation, official business becomes a link between individual learning and organisational learning.

8.2.4.1 Widening Individuals' Knowledge

The point in investigating this topic is not to highlight the importance of official business or to argue that it is necessary in the main for the process of knowledge creation, but rather, it is to postulate the idea that official business includes multi-functions which include the provision of opportunities for members to widen their

knowledge in an interactive way. In order to deal with official business, individuals develop a sense of mutual trust and shared ground for exchanging insights. This is similar to the idea of communities of practice, which enables its members to share their experiences within a non-canonical atmosphere (Brown and Duguid 1991:40-45).

I particularly highlight the point that the environment in the TPG can reflect the non-canonical atmosphere, which is usually suggested by the scholars in the field of communities or practice. Because the system has no rigorous mechanism to discipline employees' performances and supervisors have no strong intention to manage individuals, employees' desire to deal with tasks is based on avoiding making mistakes and their sense of responsibility. The situation in which interactions may occur when the individual wants them is similar to the situation that is described in the concept of communities. Because participation has value to its members, they join the interactions. (Peile and Briner 2001:396-403)

However, some, such as the employees in the three cases of this study, are motivated by interactions. They show their strong desire to participate in interactions and to deal with official tasks. In a community of practice, members volunteer to participate in activities (Lesser and Storck 2001:831-842), fostering a sense of mutual engagement and developing shared repositories and discussion databases. Official business in a particular environment such as the TPG becomes a stepping-stone by which individuals can broaden the horizons of their knowledge.

8.2.4.2 Providing Common Ground

Official business is the life-blood of an organisation like the TPG. In an organisation, official business is the linkage which associates individual performance and

organisational goals. Ernst (2000:228) suggests that tight linkages among internal and external networks may sort out the problem by way of circulating abundant information. Official business in the TPG reflects Ernst's idea.

When an organisational goal is set, some strategies or plans are developed in order to achieve the organisational goal. This process then instigates a great deal of official business for the purpose of implementing the plans or the strategies. In this situation, group leaders are the people who take responsibility for the official business and subordinates are those who help group leaders to complete tasks. So, completing official business is a common purpose for both supervisors and their subordinates. In this situation, both group leaders and their subordinates have common ground that can be viewed as a base to develop their individual perspectives. Based on this situation, official business becomes a key to associate one person's effort with another's.

The above situation highlights the importance of common ground that brings different resources together. Similarly, scholars in the field of communities of practice point out the significance of a domain of knowledge. However, because official business is compulsory, people cannot give it up when the learning is too painful. By contrast, voluntary learning such as that in the communities of practice may easily be given up if the experience is unhappy. This is the reason why some people criticise communities of practice for being very unstable, and argue that maintaining a community of practice is more difficult than creating one.

8.2.4.3 Integrating Varied Resources into the Organisation

In order to complete official business, some elements which are related to individual behaviours are involved in the process of completing tasks. This situation echoes some

scholars' idea that knowing in an organisation is a collective phenomenon, which is constructed not only by various participants' expertises through which they perform their work but also by the shared methods in which they interpret their experiences. (Brown & Duguid, 1991:40-57; Gherardi and Nicolini 2000:7-19). From the angle of resource integration, some elements, such as individuals' professional knowledge and organisational routines, may influence each other. From the angle of mental process, some factors, such as one's responsibility and attitude to work, may influence each other. From the angle of means, some elements, such as using interpersonal networks and the notion of doing exchange, may follow each other.

Official business is not the only link between individual learning and organisational learning. However it makes the individual realise the meaning of his or her participating in learning processes (Borthick and Jones 2000:181-210). By way of this, the individual may then understand his or her own position in the world which he or she constructs.

8.3 Attitude

In previous sections, I have argued that one's value system critically affects one's motivation for doing things. The influence also directs one's interactions with others, so with consequent effects on the way one makes comparisons, one gains the acceptance of the group, establishes interpersonal networks and engages in exchanges. Because one's evaluation of what is important is shifting, the effects of the four elements become uncertain and so the results of their interactions are unpredictable. I also argued that official business becomes common ground which bridges different knowledge domains and also integrates individuals' intelligence into the organisation. In order to deal with official business well, people's attitude to interactions between

colleagues, tasks and supervisors becomes an important key which enables them to continue their learning derived from dealing with tasks. From this point of view, this section will discuss the influence of one's attitude on knowledge creation.

It may be possible, in fact probable, that shifting combinations and permutations of the four elements mentioned above will create some chances to construct new understandings. The individual's value system motivates him or her to start interacting with others. The official business enables the individual to gain a "ticket" to participate in interactions within the group. However, although we have established that the learning activity may already have been triggered by one's value system as well as by necessary official business, it is equally important to find out what the factors are which enable the learning activity to keep developing.

In my opinion, the most important of these factors can be summed up in the word "attitude". Through the fieldwork, I discovered that one's attitude to interactions is a critical key that may determine whether or not interactions are able to continue. This is not only because the individual's attitude reflects his or her value system in relation to the particular events, but also because relevant people will depend on the individual's attitude so as to adjust themselves to the interactions. In a nutshell, one's attitude to interactions and other people's interpretation of the attitude may modulate the intensity of interactions between the four basic elements.

8.3.1 One's Attitude and the Other People's Feeling

In the previous section, we mentioned that Mr. W's teaching Mr. X how to deal with official business makes both sides learn things through their interactions. The official business is the key which triggers their learning process. However, learning is, in my

opinion, like a candle in the wind, which may be blown out in an instant. It needs particular factors to cultivate the learning process. When one's attitude to interaction is acceptable to the other person, the interactions between them can be sustained so as to continue their learning. For instance, employees in Mr. W's group were impressed by his open attitude to discussing official business. Because of the acceptable attitude, other colleagues in the group feel free to discuss official business with Mr. W. These discussions then improve the relationships between Mr. W and his colleagues. In Mr. X's case, Mr. W's attitude to tasks made Mr. X trust him, so their interpersonal networks were established and their further communication would become possible.

Attitude is a presentation that shows one's mental status (Wiggins, Wiggins and Zanden 1997:8-9). According to Ajzen and Fishbein (1980:8) , attitude toward particular behaviours includes beliefs that the behaviours may result in particular outcomes and evaluations of these outcomes. When the individual values certain events, his or her attitude to the events may be different from the attitude to other things (pp.239-242). So, if one's value system can be viewed as input, one's attitude is output. In other words, one's attitude is an external presentation, while one's value system indicates an internal situation. Because attitude is a presentation, it does not necessarily reflect one's real belief or intention, but makes other people realize one's ways of dealing with things. The other people will then gradually develop a general feeling about the particular person's attitude to interactions. This situation highlights the influences of one's external presentation on other colleagues.

In this study, Ms. M's attitude was regarded as "soft". It was not because she had a soft personality, but because her colleagues, such as Mr. F, had a feeling about her general ways of interacting with others. Mr. L and Mr. K felt nervous while they interact with

Mr. J, and gradually believed that Mr. J was a rigid supervisor. The terms "soft" and "rigid" reflect employees' (Mr. F, Mr. L and Mr. K) general feelings about Ms. M's and Mr. J's attitudes to interactions.

One's value system is different from other people's views about one's attitude. For instance, Ms. M's sense of honour and responsibility was what I refer to as her "value system", while her "soft" ways of dealing with things was her attitude to interactions. Mr. J also valued the sense of responsibility and he had built a common value for his group. However, his attitude to interactions hindered his communication with colleagues.

The influence of attitude on interaction is a relative concept, which means that one's attitude does not necessarily affect interactions. On the one hand, the interaction is the concept which includes both sides, stimulation and reaction, so no single side can determine the results of their interactions. On the other hand, the concept of influence also involves both sides giving and receiving, and giving influence cannot guarantee that the other side really receives the same influence (Charon 1998:37-38). In this situation, although the individual's goals, means, and his or her views of resources may be affected by his or her attitude, the attitude does not necessarily evoke the expected outcomes. The attitude is an internal factor; yet its effect is determined by the other people's view about the attitude.

8.3.2 Key Person's Attitude in the Group

8.3.2.1 Ms. M's Attitude to Interaction

All the interviewees in Ms. M's group agreed that Ms. M's attitude to interacting with others is one of her particular characteristics and improves her interpersonal

relationships. Mr. F particularly pointed out that Ms. M *'looks gentle and speaks softly'*. Because colleagues feel comfortable about communicating with her (Ms. K, Ms. L and Mr. F), not only can she collect a lot of information through the conversations but also her interpersonal networks are well established.

Ms. M's soft attitude is probably an intrinsic part of her personality, which means that she may be used to adopting this attitude to communicate with people. However, it is also possible that because she is not a legal leader, she has no obligation to push her colleagues so that she can always keep a soft attitude to people. Since she does not need to take any responsibility to direct members in the group, she can lend a hand or give advice whenever she wants. Because she did not force her colleagues to accept her opinion, she can keep her temper and have a good relationship with others all the time. Since her suggestions deserve consideration, and she also makes people feel they are not being compelled at all, people may feel free to think about the suggestion. Because Ms. M persuaded her colleagues of her sincerity, they accepted not only her suggestions but also her, the person. According to the theory of the "halo effect", when we approve of one part of a person's behaviour, our approval tends to spread to other parts of their behaviour (Wiggins, Wiggins and Zanden 1997:185). This might be the reason why Ms. M was getting popular among her colleagues, and it was probably part of the reason for her becoming an informal leader.

Although a person's attitude may derive from his or her personality, it is also possibly formed by the environment in which he or she is. Each member in Ms. M's group has his or her particular tasks and each one's performance is not necessarily associated with another's. Such a kind of work makes people in the group tend to concentrate on their own work. Even though they sometimes discuss their tasks with each other, they

pay more attention to their own business. By contrast, Ms. M does not adopt an indifferent attitude to interactions, but becomes enthusiastically involved. Her attitude becomes distinguished in the group so as to make other members in the group reflect on themselves.

8.3.2.2 Mr. J's Attitude to Interaction

Mr. J's and Mr. W's attitudes are different from Ms. M's. Mr. J was a very assertive person when he was interviewed. He was very confident of his management ability, and he also respected the questions which I asked. However, it might be that he adopted a softer attitude to me because I was a researcher and a guest at that moment. His colleagues, such as Mr. L and Mr. K, thought that he was a strict person. They worried for me that Mr. J might be over-bearing during my visit even though they believed that I could learn something from interviewing Mr. J.

It seems that their image of Mr. J is somewhat different from Mr. J's view of himself. In Mr. J's view, the group uses discussion to sort out problems together. In his opinion, all the members participate openly and enjoy sharing their ideas with one another. Ironically, in Mr. L's and Mr. K's opinion, it is Mr. J who dominates the meeting.

Mr. J also mentioned that he encouraged members to read books in order to understand some popular topics. This shows that Mr. J may get involved in 'open discussions' and play an important role in manipulating the discussions. Because of his duty of being a supervisor, a leader may unavoidably get involved in interactions in the group. However, his or her attitude to the interaction may also influence other members' behaviour in the group. In Mr. J's case, because his attitude to people may be too

rigorous, employees' behaviour may be inspired by a wish to avoid being punished rather than a desire to do something constructive.

8.3.2.3 Mr. W's Attitude to Interaction

In Mr. W's group, Mr. W's personality is not dominant. Some of his colleagues, such as Mr. X and Mr. N, think that he is a helpful and kind person. Ms. P said that Mr. W took on most of her duties when she went to the University. When Mr. W faces problems, he explores archives to see if there is any similar problem which has been sorted out before, and he also wants members who are from different backgrounds to give ideas. Compared to Mr. J, Mr. W's attitude to dealing with differences is more to recognize them than to direct or manage them (Reynolds and Trehan 2003:165).

On the other hand, Mr. W's self-discipline seems to be strongly motivated by making comparisons with others. For example, he highlighted the fact that he had been in charge of the department which had been recognised as the most efficient in the TPG for the management of regulations and archives. He was also proud of his present department, which produced good quality documents that have never been questioned. Mr. W mentioned that he had to publish essays in order to keep being promoted as fast as his peers, because he lacked the educational background to gain the credits for promotion. His energetic attitude towards being excellent not only reflects the tradition (self-expectation) of the department, but also forces the tradition to keep moving. In this respect, Mr. N pointed out that he regarded Mr. W's energy as an example to follow.

8.3.3 Attitude and Interpersonal Networks

From the angle of interpersonal relationship, Ms. M's soft attitude and Mr. W's open attitude to sorting out problems make their colleagues feel free to interact with them. However, Ms. M's situation is different from Mr. W's. She is pleased to listen to colleagues not only when they discuss official business but also private matters, and her colleagues are happy to share their concerns with her. This situation is probably because she is one of the subordinates, so she is identified as being in the same boat with others. By contrast, Mr. W is a manager. Most interactions between him and his colleagues derive from sorting out official problems. Because Mr. W is always keen to resolve problems and welcomes any suggestions, members may feel free to interact with him and, in addition, their work problems can be sorted out through their discussions.

The data does not show whether or not Mr. W's position of supervisor affects his open interactions with colleagues. It seems to me that both Ms. M's and Mr. W's attitudes not only help them to establish good interpersonal networks, but also open channels for them to sell their ideas in the group. The interpersonal network becomes a steppingstone for them to operate the interactions of the four elements. Their opinions can then always formally or informally affect the group dynamics.

Compared to these two cases, Mr. J is also a supervisor and his strict attitude affects his meetings with members considerably. Because Mr. J makes colleagues feel they are being supervised, some colleagues, such as Mr. K and Mr. L, do not want him to know more about their real thinking. For example, they do not want Mr. J to know parts of the content of our interviews. In a way, it seems that Mr. J's opportunities of interacting with colleagues are hindered by his attitude. According to Rogers

(2001:53), group leaders may be too dominated to facilitate group creativity, and a participatory group that is like Mr. W's is one where pleasant social relationships are most likely to develop. Some issues may be worth investigating further: First, since some attitudes are known to be harmful to a spirit of open communication, why does the individual keep adopting these attitudes towards things or people?

This question leads us to reflect on the relationships between one's value system, behaviour and habit. For example, Mr. J's attitude restricts his interactions with colleagues. Knowing or not knowing other people's thinking, Mr. J still controls the whole situation very well. Judging from some of the things he said in the course of my interview with him, it seems that he adopted a certain attitude to the conduct of official business, found it successful and has consequently never changed it. This phenomenon can probably be explained by attribution theory (Weiner 1974). People may recall their successful experiences in order to face oncoming similar problems. However, attitudes such as Mr. J's can, according to our previous analysis, block communications. How can this approach work without good communication? Most of the supervisors in this study believed that supervisors did not have enough power to discipline subordinates because of the regulations. However, how do supervisors motivate subordinates to participate in organisational activities?

Mr. J's case seems to show that supervisors can become very powerful even in a bureaucratic organisation such as the TPG. Mr. J's method of over-coming the inherent sluggishness of the system (Mr. J used the term "sluggish" to describe the TPG) seems to use norms to discipline subordinates, and this method more or less makes subordinates frightened. On the other hand, Mr. W's method, however, is to work within the traditions of the service and to move them on so as to encourage a group

dynamic, which leads to efficient working practices. What is the meaning of both leadership styles?

8.3.3.1 Attitude, Network and Power

Questions such as the above are related to one's value system. The system is not absolute, but relative. Whether the issue is important or not to the individual depends on his or her attitude to the event as well as other things. If an individual such as Mr. J does not think that communication is important or if that individual has something more important to do, he may pay more attention to the other thing rather than worry about whether or not communication is working. This reasoning echoes Mr. J's view of communication, which regards the interpersonal network as a tool that enables him to obtain his management purposes.

Because it is a tool, he can choose whether to use it or not. For running the organisation, what most concerns him is whether or not the group can run well. He uses 'Hero', 'Value system' and 'Bible' to direct interactions. He also has his informal channels to explore employees' opinions. In my opinion, Mr. J knows clearly what he is doing and why he adopts the attitudes to people and to things. Additionally, he understands well about how to manipulate the power in the organisation: power exists in the group and is based on relative situations. Understanding this concept, he apparently keeps himself isolated from interactions in order to maintain his absolute power.

8.3.3.2 Why Isolate himself?

In order to understand Mr. J's intention further , let us recall Mr. W's case. In previous chapters, I have suggested that the market is one of the keys to directing or creating

power, and one's participation may be able to change the market. I also used Mr. W's story as an example to highlight the concept that the market may be able to be modified through one's participation. Therefore, if Mr. W's participation can change the market, why can the other people not do the same thing?

Mr. W's power is actually unstable. Mr. W tries his best to participate in the interactions with colleagues and then he wins colleagues' respect. In this situation, he is involved in the influences of power. However, it also involves the risk that he may lose power some day, when some vicious circle occurs. For example, Ms. M's informal power is also formed by participation. Because her networks are strong (the market is big and good), her informal power gradually challenges the formal power in the group (her colleagues respect her more than their supervisor).

By contrast, Mr. J does not need to worry about this sort of risk, because, since the beginning, he has never been involved in the interactions. He builds up the 'Hero' legacy and establishes the value system and makes people interact with each other. His strict attitude makes him isolated from the interactions, so that he can always be behind the scenes to manipulate the power. It seems that he plays a puppet show in front of other colleagues so that audiences, the other people in the group, are involved in a complicated plot. Interacting with power is like playing with fire. It is possible that the individual may be burnt if he or she is careless. Mr. J lights the fire, keeps far away from it and directs the fire carefully.

8.3.3.3 Purpose and Means

Reasoning such as the above indicates that one's attitude is sometimes related to one's purpose in the group, even though some people such as Ms. M and Mr. W do not

intentionally adopt particular attitudes in order to achieve certain purposes. One's attitude is an important key for establishing interpersonal networks. However, it is not certain that every one would like to have a close relationship with others. The decision depends on how the individual views the relationship. Once the individual judges the relationship to be a critical issue, he or she will then pay attention to it. Once the relationship is established, interpersonal exchanges, gaining group identity and making comparisons will then follow after. Each of the elements is involved in one's participation, judgement, practice and habit.

We may attribute Ms. M's interpersonal network to her gentle attitude to people. However, the attitude may derive from her habit or personality. The habit may be the result of accumulated practices and experiences. Her practice reflects her habit; yet through participating in interactions, she understands other people's views about her practice. Understanding the views of others and her own practices, she may restructure her knowledge base, which is the foundation of her judgement. In this situation, her judgement, habit, practice and participation (as has been mentioned in Chapter 7) are intertwined with one another and it is hard to tell which one starts the interaction.

However, the most important thing, it seems to me, is that all these elements are fluid: they assume more or less importance as circumstances change. For example, some may think that group identity is important to them, yet others may believe that engaging in exchange is more crucial. In a particular circumstance, the individual may focus on establishing his or her interpersonal networks, yet under certain conditions he or she may prefer to withdraw from people.

8.3.4 What does One's Attitude Mean with respect to Communities of Practice?

Some scholars extract factors from successful examples to highlight the particular interactions within a community of practice. For example, Lave and Wenger (1991) suggest some keys, such as sharing goals, the use of knowledge, interpersonal relations and the relationship between work and the value of the activities. Later Wenger (1998a:74-82) added three elements, joint enterprise, mutual engagement and a shared repertoire of communal resources. Storck (2000:8-11) gives six factors: openness, common culture, mutual interests, collective learning, embedded learning and freedom. Lathlean and May (2002:394-398) suggest seven factors that influence the development and maintenance of a community of practice. They are membership, commitment, relevance, enthusiasm, infrastructure, skills and resources. These researchers do not particularly highlight the influence of one's attitude on interactions. In this study, one's attitude is a key that determines whether or not the results of these interactions will be satisfactory.

8.3.4.1 One's Attitude Affects Interpersonal Networks, so Interactions become Unstable

Wenger (1998a) highlights the importance of interpersonal networks and relationships that enable the individual to form an informal fabric of communities so as to share their practices and to make official business effective. However, the data in this study shows that one's attitude will affect the process and the result of networking.

Since the effect of one's attitude depends on the other people's views about the attitude, the functions of the interpersonal network become unstable. This unstable situation also affects all the interactions associated with the attitude. The focus of this section has been that one's attitude may affect one's interactions with others. By way of

interpersonal networks, the influence becomes very big and so affects the power in the group. Therefore, the concept of attitude here focuses on its influences at group level, rather than at the individual level.

8.3.4.2 One's Attitude Affects the Four Elements so as to Influence the Power in the Organisation

In this section, I suggest that one's attitude is similar to one's value system, which can be viewed as a catalyst to one's judgement, habit, participation and practice. They interact with each other, so that one's knowledge base can adjust itself to the changes of the environment. This situation also contributes to each of the four elements which I mentioned in previous chapters, including gaining identity, making comparisons, establishing networks and engaging in exchanges.

During the process of interacting with the four elements, the individual's knowledge can circulate in the market, and different ideas from other knowledge domains may also challenge the individual's thinking. This idea was discussed in the previous chapter. However, one's attitude to interactions and other members' views about the attitude will affect the result of the interaction of the four elements, so the mutual engagements are fostered or ruined.

In this study, I also highlight the relationships between power and interpersonal networks. I particularly point out that because power is a product and a by-product during the process of people's interaction, people cannot get rid of the influence of power even if their interactions are fostered by a very open environment such as a community of practice. Power holders evaluate their environment and adopt appropriate attitudes in order to steer their influence. Through evaluating the purpose

and the means, the individual restructures his or her established knowledge and, at the same time, understands more about his or her own view of the world.

8.4 A Summary

The focus of this chapter has been on three adjustment factors, including one's value system, official business and one's attitude to interactions. They are keys which influence the effects of the four basic elements – being accepted by the group, making comparisons, establishing networks and engaging in exchanges.

Initially , one's value system prompts actions, which enables the four basic elements to be triggered and continued. In a community of practice, it is important that its members are voluntary participants (Lesser and Storck 2001:831-842) and the participation has value to its members (Peile and Briner 2001:396-403). In other words, it is necessary that participants have a strong desire to join in activities and to merge their individual value systems into the common value of the community.

The effect of one's value system is not absolute but relative. Whether or not the individual's value system can affect the group depends on the market formed by interpersonal networks. If the individual does not value particular interactions, he or she may not adjust him or herself to interactions, so "mutual engagements" will be in vain. In this chapter, I have demonstrated how people's interactions in the TPG were triggered and how they affected the group dynamic. The findings also enable me to reflect on my own understanding of the concept of CoPs.

Secondly, official business is the key which brings members' resources together. Engaging in shared tasks provides individuals with an opportunity to explore diverse

insights, and also enables the basic elements to interact with each other. In the concept of CoPs, the idea of joint enterprise is highlighted. The essential point of this idea is to form common ground, which enables participants to exchange resources (Graham, Osgood and Karren 1998:34-38; Dove 1999:16-17; Thomas, Kellogg and Erickson 2001:866). The common ground can help not only to trigger mutual activities at the beginning, but also to continue the interactions (Lesser and Storck 2001:831-842). In the TPG, members help each other in order to deal with official business. Dealing with shared tasks, individuals compare themselves with others, identify their roles in the group, build interpersonal networks and exchange relevant resources. Official tasks provide a loose system such as the TPG with some compulsory interactions by which diverse domains of knowledge can be integrated into the organisation.

Thirdly, the concept of organisational routines has also been highlighted in this chapter. When official tasks are integrated into organisational routines, people's interactions are also affected. This idea echoes what Wenger (1998a:82-84) refers to as a "shared repertoire". Shared repertoire refers to some obvious outcomes of a community of practice, which includes the history and tradition of the community, as well as some symbolic artefacts, such as their shared language, styles, stories, tools and actions. Because of these shared symbols, members in the community can communicate with each other easily. This also echoes Nonaka's (1990:27-38) idea of using redundancy to improve knowledge sharing. On the one hand, routine is one of the outcomes of organisational performances, so that individuals can explore the system quickly by way of understanding these shared repertoires. On the other hand, relying on routines too much can hinder opportunities for knowledge creation.

Fourthly, one's attitude to interactions is another important idea in this chapter. This idea has not been discussed further in the field of communities of practice. In relation to this topic, I do not focus on the individual's attitude to dealing with tasks but on other people's view about the individual's attitudes to interactions. The other people's view indicates the influence of the individual's attitude on the group, which also identifies other people's general evaluation of that particular individual. Some shared stories make other members have particular feelings about particular persons, and this enables the other members to determine how deeply they may be involved in interactions with these particular people. This situation also provides key persons with an opportunity to manipulate the power in the group.

Chapter 9

Conclusion

The aim of this research was to explore, through fieldwork, how individual learning interacted with organisational resources within the context of a public sector organisation. The main theory that I adopted in this study was the concept of the 'communities of practice' proposed by Lave and Wenger (1991).

Based on this concept, the major task of this research was to examine public servants' interactions in order to extract some elements and factors from interviewees' experiences. The 4 elements I identified were: gaining group acceptance; making comparisons; establishing networks; and engaging in exchanges. These are viewed as basic functions, which enable the individual to develop his or her established knowledge in the organisation.

In addition, I have highlighted 3 adjustment factors as follows: one's value system, official business and one's attitude. I have posited that the development of these 3 factors affects the 4 basic elements, so that individual learning within the contexts of organisation becomes unpredictable. Theorising about these elements and factors, I tried to explain why and how knowledge is formed and shared so as to reflect on my established understanding about communities of practice.

9.1 The Impact of Downsizing

The downsizing policy in the TPG provided an important context for this study. Some scholars suggest that when the individual is facing the impact of big changes, learning

is sure to happen and is bound to be evident. This study adopted this idea to highlight the individuals' learning derived from their interactions with other colleagues while they were facing the impact of downsizing. Because the impact was considerable, people paid attention to and could feel the difference between change and no-change as it affected an important facet of their lives. When people value change, they may evaluate each difference and try to adjust to it.

As demonstrated in my research, one consequence of the downsizing policy was the taking over of some departments by the authority of the central government, while others were given a new title and retained their original functions. People's reactions to this policy varied: while some felt that it was cruel, others interpreted change as only a normal occurrence in organisations. It has proved difficult to determine a common criterion defining whether or not the impact was significant enough to jolt individuals into significant learning. Although the data collected does not confirm the supposition that the downsizing policy has had an impact on individuals, it does nevertheless indicate that people's actions are directed by their individual value systems. People belonging to the same group may have different value systems, while the same person on different occasions may rank values on a different scale of hierarchy. Because people feel that certain events are, in particular circumstances, important to them, they then recognize changes of the events as having an impact.

According to my findings, and to the fact that the downsizing policy generated a degree of uncertainty about their future and shattered their original belief in employment security in the TPG, employees affected by the change started to collect information in order to adjust to the new system or else explore other public service

careers. This behaviour can be interpreted to signify that life in the bureaucratic organisation was still meaningful for these employees.

9.2 The System and the Culture

In communities of practice, because people know what they want to acquire in the community, they voluntarily join the community and try to merge themselves into the group. By contrast, employees in the TPG have no obvious intrinsic motivation to participate in organisational activities. They do not need to worry about being laid off. A well-funded job-security system has already guaranteed their identification as public servants. This situation derives from the particular culture of Zen-chin.

Zen-chin makes supervisors avoid punishing bad behaviour, so that most public servants in the particular environment do not worry about being laid-off. On the one hand, this particular culture makes supervisors with no desire to discipline employees, so that the function of management is constrained. On the other hand, Zen-chin provides the organisation with an easy and cooperative atmosphere, so that interpersonal networks and some particular ways of exchanging resources are easily established. From this point of view, the sluggish system still has the potential to facilitate its members' learning of organisational knowledge. Some ideas that are drawn from the discussions in this study enable me to reflect on the concept of CoPs.

9.3 The Three Cases

In this study, I revealed 3 groups of interactions – those who were affected by knowledge management mechanisms; those who followed the group's traditions; and those who gave and received help through informal networks. All of those studied were in the TPG and they were undergoing the impact of the downsizing order. I

deliberately provided a snapshot of people's interactions within these circumstances, in order to understand how and why people learn things through interactions with their colleagues.

9.4 The Four Basic Elements and the Three Factors

9.4.1 Identity and Comparison

The identity which is discussed here includes self-identity and group identity. The community provides a place where people can display their knowledge. Not only will members develop through interaction with other members of the group, but they also come to comprehend what other colleagues do in the environment. They create and fulfil their expectations and learn by comparison between their expectations and other members'. It is not necessary that the majority of people's expectations will become a shared vision, yet the individual's self-expectation will be juxtaposed to and affected by other people's. In this situation, individuals try to adjust themselves to the group's expectations for the purpose of being accepted by the group. By so doing, they define themselves in relation to their community. However, this understanding will not necessary emerge or be detected soon after the interaction happens. The understanding may come at a later time, perhaps during a period of reflection. Whether or not the individual reflects on him/ herself depends on the degree of importance he or she attaches to the differences which are revealed by comparison. In this situation, the individual seems to experience a learning process that is triggered by pursuing group acceptance and making comparisons.

On the other hand, identity also provides a common ground, so that members know the value system of the community. According to Ryan and Edward (2000:68-78), "*Identification reflects a conscious valuing of a behavioural goal or regulation, such*

that the action is accepted or owned as personally important". However, this element also implies a negative aspect. Individuals within the group sometimes have reservations about accepting entirely the group identity and ethos, so that some people's achievements are exciting while others' are disappointed. The unequal emotion within the community leads to some sorts of competition, while these comparisons also make people reflect on themselves.

9.4.2 Networks and Exchanges

In this study, the concept of networks implies not only the channels to access knowledge but also that establishing networks becomes itself a form of knowledge. By the same token, engaging in exchange is not only for swapping the know-how, but also for acquiring the knowledge of how to improve the exchange.

In the TPG, learning does not occur necessarily for the purpose of engaging in interactions, but can be one of the means to develop networks and exchanges. From this point of view, people widen their networks and enhance the value of the resources they have by way of sorting out problems together, sharing feeling with each other and promoting particular ideas. When particular resources or knowledge are valued, the distinction between the mainstream and the peripheries becomes noticeable. Mainstream knowledge may be so strong that it dominates peripheral knowledge with the result that the latter becomes too weak to contribute to established knowledge. This shows an unequal situation of power distribution.

The power distribution in a community of practice is still unequal. Even though it is suggested that people can enter the community whenever they want and they can also withdraw easily, their decisions are actually affected by the unequal powers in the

community. Wenger suggests that a community of practice internalises members and ideas from the periphery so that knowledge is developed and shared in the community. Wenger's idea actually reflects that powers in the community are centralized rather than diffused. The centralization of power improves the function of identification. In order to be accepted by the group, people have to go through a series of learning experiences so that they can be recognized as insiders. If people are interested in being entirely involved in the community, they should keep learning in order to enter the core of the group. In some communities, powers are not centralized, but some of them may be so strong that they can dominate other powers. The power distribution in a group distinguishes the essential unit from the peripheral parts.

In the TPG, because of the liberal and safe environment, supervisors have no strong desire to discipline employees, while the powers from informal networks are too scattered to challenge the formal authority. Some, such as Mr. J, try to manipulate the power and to establish mechanisms through which scattered knowledge can be integrated into organisational routines. Some, such as Mr. W, deliberately share the power to members in the group and try to establish an equal status for communication. However, when Mr. W releases the formal power, he actually gains the informal power. In the end, Mr. W. holds both formal and informal power.

This study points suggest that these 4 elements - establishing networks, engaging in exchange, pursuing group acceptance and making comparisons - interact with each other. The interactions of the 4 elements reflect the influence of power on the group. The market in knowledge also affects the results of the interactions. However, the 4 elements cannot complete themselves. The influence of the 4 elements is still

modulated by 3 factors – one's value system, official business and one's attitude to interactions.

9.4.3 One's Value System

One's value system is, in a way, a key which determines actions in response to stimuli. It is a foundation upon which the individual may rely to act on his or her judgment. In this study, the term "value system" means not just the individual's ethical outlook but also his or her understanding of what is important to him or her. This idea is always associated with the concept of making comparisons. Through making comparisons, individuals use their judgement to determine which value is important to them, so that they have the motivation to adjust themselves to the new situation and to cope with difficulties.

This research argued that because gaining the group's acceptance is meaningful for the individual, he or she pays more attention to the differences, which emerge from making a comparison. Hence, since the differences are important to the individual, he or she tries to establish interpersonal networks in order to exchange knowledge to diminish the differences. When people exchange their ideas in a community, certain ideas may be highlighted and certain topics may be continued, so that the power that directs learning and knowledge is formed. In this situation, one's value system can be viewed as an adjusting element which enables the individual to evaluate their involvement in the four elements.

When the mainstream directs the individual's learning in the organisation, a shared practice will be established. When a cognition or behaviour is repeatedly performed, it generates a habit which influences one's judgement and attitude. However, varied

ideas can still emerge and challenge the mainstream during the process of interactions. When some ideas echo the individual's sense of importance, he or she may reflect on his or her own performances and also on the subjects which he or she interacts with. In this situation, the perception of importance not only makes the individual reflect on his or her practice, but also enables him or her to rethink the relations between the individual's value and the common value in the organisation.

9.4.4 Official Business

Official businesses are, in other words, the tasks which the community asks its members to engage in. They can be formal or informal, structured or unstructured, concrete or abstract. They are the tasks, behaviours and attitudes which need to be fulfilled or displayed if the member would wishes to be part of the group.

In the TPG, employees' tasks are given and their targets are set. The style of organisations is designed to cope with a series of problems, and members are not allowed to withdraw from their duties. Although it is, in this study, viewed as a liberal and safe environment that people can develop their own ideas in the TPG, people cannot help completing their duties because of the power from the bureaucratic organisation. In these circumstances, it is possible that employees contribute their knowledge in order to complete official business, even though the knowledge sharing and creation may be inefficient. On the contrary, a community of practice is an informal style of organisation which is formed by people's incidental grouping. The key that binds members together is the individuals' enthusiasm for exploring knowledge or their need for sorting out problems. In this situation, the knowledge sharing and creation may be efficient, but this sort of community may easily fall apart, especially when people have already obtained what they aim to achieve.

On the other hand, official businesses act as channels to link individual knowledge and group knowledge. In order to complete a common task, different ideas inevitably encounter each other so as to broaden one's horizons. By way of continuous interaction between the individual and the system, particular knowledge will embed itself in routines of the organisation. Some scholars such as Nelson (1991:61-74), Tsoukas (1996:11-25) and Feldman (2000:611-629) echo this idea and suggest that knowledge in an organisation is not stored in the heads of individuals, but is embedded in organisational routines.

In order to deal with official business, sets of ready-made solutions may help to sort out similar problems quickly, yet the quicker solutions may not be the most appropriate ones. In terms of knowledge creation, depending on ready-made solutions may leave the individual with paralysis of thinking. Some scholars argue that routines or one's habits may hinder knowledge creation, because people may rely on routines too much to make comparisons. Some suggest that the most efficient way for organisational learning to take place is by viewing change as a sort of routine; this attitude would enable individuals to accept and get used to changes. However, I do not think that the focus of this problem should be on 'routine' or 'habit', but on what the individual's attitudes to the routines. One's attitude to interactions enables other colleagues to determine how deeply they will interact with the particular person.

9.4.5 One's Attitudes to Interactions

The individual's attitudes to tasks enable other participants to foresee their interactions with the individual. People will evaluate this situation and adopt appropriate methods to respond to the interactions.

Thus the study did not focus on what sort of attitude is adopted by the individual, but rather it attempted to elucidate other people's views about the person's attitudes to interactions. When people are engaging in knowledge exchange, establishing networks, making comparisons or pursuing identities, their colleagues' views about their attitudes to these actions affects the processes and the results of the interactions.

Wenger's (1998) idea of sharing knowledge indicates that CoPs are groups which have a "well-knit structure". Because the concept of CoPs highlights interpersonal relations so much, people's interpretations of the individual's attitudes to the interactions intertwine with the process of knowledge sharing and creation. One's attitude will influence the effects of interactions and the market in knowledge, so that power holders try to adopt particular attitudes to keep their power and to manipulate interactions.

9.5 Methodology

This research attempted to study public servants' informal learning that derives from their interactions with their colleagues and the environment. In order to understand the whole situation and to explore further people's relations within the organisation, I adopted the method of 'case study'. Utilising semi-structured interviews, I tried to grasp people's experiences, by way of exploring their interactions with colleagues, tasks and the system. This process allowed me to construct my understandings about the individuals' positions within the organisation and their relations with other colleagues. Furthermore, this method of building cases enabled me to explore some subtle relations within the organisation, so that I could extract, by way of data analysis, some elements and factors from these digested material.

The process of extracting these elements and factors was proceeding along with the research journey, which includes coding, interpreting, developing and criticizing. It allowed me to fuse different horizons which derive from the data, theories and my established knowledge. Building story lines and making comparisons between my interpretations and scholars' opinions, I understood more about the theories, the cases as well as my previous misunderstandings in relation to the topic.

Some experiences, such accessing interviewees, adopting the door-to-door method, discussing particular issues with interviewees and keeping in touch with key-persons, seemed to reflect the 4 basic elements – being accepted; making comparisons; establishing networks; and engaging in exchange – which have been developed in this study.

Each research method has its advantages and disadvantages, so the researcher has to choose appropriate methods to explore reality, to conduct fieldwork and interpret findings. These choices are related to the researcher's value system, the tasks of the research and the researcher's attitudes to the process. This situation also echoes the implication of the adjustment factors in this study.

9.6 Summary

This study has identified 4 basic elements and 3 adjustment factors. Interactions between the 4 elements may increase or decrease the efficiency of knowledge sharing and creation. In order to gain group acceptance, people discipline themselves to participate in organisational activities. On the one hand, the process of pursuing group's acceptance may trigger the individual's learning motivation. On the other

hand, it may also hinder the individual from developing his or her best potential but lead him or her to the development that is recognized by the group. Being affected by interpersonal networks and the concept of exchange, people's learning will be directed by the market even though some may not intend to use the market as a power to affect others. However, the 4 elements cannot run by themselves. It is one's value system that triggers their interactions. It is the official business that brings members' efforts together and integrates their wisdom into the organisation. In the meantime, other colleagues' views about one's attitudes to interactions affect their desire to participate in the interactions, which determine whether or not the interactions will continue or stop.

Wenger (1998a) suggests that knowledge can be shared and developed in a community of practice, which means that there are well-organized networks to share knowledge and there are also mechanisms to digest information. Having a tight structure, knowledge in the community can be managed well without disorder. Through developing networks, knowledge that is embedded in one's brain can be shared easily without any obstacles. However, knowledge sharing is not a simple process. Interacting with the elements and factors that have been discussed in this study, the process of knowledge sharing and creation is regarded as a complicated reforming course in this study.

Sharing knowledge with those employees who are from different backgrounds might make the original meaning of the knowledge diverged, modified or even distorted. However, this modified or distorted meaning may also offer a possibility for the community to re-examine its original knowledge so as to create new ideas. Because the knowledge structure in each one's mind is different from person to person, the angle or

the process he or she adopts to digest the new information is relatively unique. New information emerging from the process of knowledge sharing may be spread and, integrated into the established knowledge base in order to create a new understanding for the community.

This research highlighted some elements and factors that were extracted from people's interactions. Theorizing about the elements and factors, some issues referring to the concept of CoPs have been pointed out. This research also indicated the dilemma between knowledge sharing and creation, which are both related to the market in knowledge and the change of power in the organisation. The researcher also explored public servants' learning in a bureaucratic organisation. The findings have shown that a sluggish environment such as the TPG can also cultivate some advantages of developing useful learning interactions.

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Appendix 1

Interview Schedule

Common Questions

(To discoverbasic information about the interviewee)

1. What's your job in the organisation? What's the title of your position? , How did you obtain the necessary skill to achieve your tasks?
2. So far, what is the task by which you have been most impressed? What role did you play in the task?

(To discover the individual's self-concept of the job)

1. What's the difference between the life in the private sector and that in the public sector? Is there a big gap? Could you please tell me your own opinion and describe your life in the public sector? (Are you happy with the life? why?)
2. Could you please make a comparison between your life in the current department and that in your previous organisation?

(Can salary in TPG be a motivation factor?)

1. Are you satisfied with your present salary?
2. Yes, I am.→ What do you feel about your economic situation?
3. No, I am not.→Why? What do you feel about your economic situation?

(To explore their opinions about their work - Group Identity)

1. It is often thought that a public servants' job in Taiwan is highly-paid and leisurely. What's your opinion?
2. It is often thought that a public servants' job in Taiwan is regularly called a 'golden bowl' in which you will never need to worry about unemployment. What do you think?

(To explore the interviewees' career)

1. We all know that passing the National Examination is extremely difficult, could you please tell me, how did you prepare for the examination? Why did you choose this career?
2. Have you been thinking about changing your career?
3. What do you want to do in the future? Would you mind telling me something about your career planning?

Specific questions for interviewing managers:

1. How long have you been a supervisor? How many employees are there in the department where you are?

(Dealing with Problems)

2. What is the main problem of managing public servants? Why do you think it is a problem? How did you cope with the problem?
3. Some employees agree that the more you do, the more mistakes you might make. What do you think about this? How do you motivate their performance?
4. Some employees agree that the more capable the individual is, the more responsibilities he or she may take on. Do you agree with this? How do you deal with this situation?
5. Do you think that Zen-chin is a problem? How do you deal with the problems arising from Zen-chin?

(Educating Employees)

1. What are the problems of educating the workforce within the organisation?
2. When a newcomer enters your department, what will you suggest to him or her? Why do you think that these suggestions are important?

(Working together)

1. I was told that there was a policy called 'building the government as a learning organisation'. Do you know the policy? How do you describe the situation in your department? A team? Or a learning organisation?
2. If you organise a team, what is the most important thing to do? Why?
3. What do you normally do to make colleagues have a desire to participate in common tasks? Please tell me your experiences.
4. How do you make colleagues work together? Please give me an example.

(The Downsizing Policy)

1. Is there any change in your organisation due to the impact of downsizing?
2. What did you do to help your colleagues adapt to the changes?
3. What are your feelings about the implementation of this policy?

Specific questions for interviewing employees:

(Value System, One's Attitude to Official Business)

1. What does the job mean to you?
2. Why did you choose this career?
3. Is there any difference between your present life in the TPG and your original idea about the life of being a public servant?
4. If a conflict between your personal life and working life happened, in what way would you sort out this problem? Why would you use this method? Have you had a similar experience? Please describe the situation.

5. If you are assigned a new task and you do not know how to deal with it, what do you normally do to sort the problem out?
6. Are you satisfied with your present tasks which your supervisor has set for you? Are there any further expectations? Why?
7. Have you ever been set some tasks that you had never undertaken before? At the time, what did you do to face the challenge? Please describe the experience.

   If the task is just what you want to take on...

   If the task is just want you don't want to take on...

- Do you think that you are the kind of person who can quickly adjust yourself to new conditions? Could you please give me an example of you adjusting yourself to changes quickly/slowly?
- When you are assigned to a new organisation, how will you adjust yourself to fit the new tasks and your new environment? Why will you choose this approach ? Have you had similar experiences before? Please describe them.
- When you are in a new organisation, which is the most important thing for you?
  - ☐ To build the relationship with your colleagues.
  - ☐ To learn the skills for your tasks
  - ☐ To adjust yourself to the manager's leadership style.
  - ☐ Other _____ (please describe)

  Why? What experiences have you had before?

(Interacting with Colleagues)

In the organisation where you work, is everyone's work different? Can everyone be deputed (trusted) to take charge of someone's work, while he or she is away?

Have you had the experience of participating with a colleague of yours in a task?

Yes →Could you please give me an example of completing the task successfully and could you give me an example of failing to complete the task successfully?

What are your thoughts about these experiences?

No →Do you look forward to having this kind of experience?

Yes, I do.→ *

I have no idea.→ Normally, how do you complete a task? Could you give me a successful example (of achieving the task) and could you give me a failed example (of not achieving the task)? What are your feelings? Could you describe the experiences?

No, I don't.→ *

*Why? Have you had similar experiences before? Or have you heard someone mention similar experiences before? Could you please describe the situation?

In that experience, what role did you play?

Large role (Active role)→**

Small role (Passive role)→**

Equal→**

**Could you describe the situation? Did you like the situation? Please explain why you played this role. Were your colleagues more experienced? Could you say 'no'? Why?

If you are set a task in the future that is similar to the experience, what will you do? Will you adopt a similar approach to completing the task?

Do you think that you have learnt something from the experience? What's that?

Some people believe that people can learn something through interactions with others. Do you think you have ever gained anything from interactions with colleagues? If you do, what was that? Could you please give me an example?

(Interpersonal Network)

1. If you need help, are your colleagues already ready to give you a hand? Will your supervisor help you?
2. Do you still keep in touch with your friends at University? Do you have friends in your work place? Do you share your problems from work together? Have you learnt anything from interactions with your friends?
3. I was told that interpersonal relationships are very important when the individual works in the public sector. Is this true? Can you tell me some of your experiences?
4. Suppose you need help with jobs in your work place, for instance dealing with a task which you have never undertaken before. Whom would you ask for this kind of help? Could you tell me your experiences?
5. Suppose you have problems with your supervisor, for instance you are misunderstood. Whom would you ask for help with such problems? Why?
6. People sometimes discuss important issues with others. Looking back over the last one month, with whom would you talk about such problems? Would you share these matters with your colleagues? Why?
7. Suppose you need advice with a major change in your life, for instance changing jobs or moving to another area. Would you ask for advice from your colleagues? Why?

(The Downsizing Policy)

1. As far as you know, what is the downsizing policy in the TPG? How is the situation now? What stage is it at? If you were a policymaker, would you support the policy? If you were a policymaker, what method may you adopt to implement the policy?
2. Does the downsizing policy affect your work? How does it affect you (both in positive and negative ways)? Is it easy for you to adjust yourself to the changes?