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Studying Cultures of Continuous Improvement as Shared Meaning Systems

**A Comparative Investigation of Group Cultures of Continuous
Improvement in Different Societal Contexts**

Volume I (Main Title)

A thesis presented in partial fulfilment of the requirements for the degree of

Doctor of Philosophy

At Massey University, Manawatu Campus, New Zealand

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May 2011

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Abstract

A conducive organisational culture is often assumed to play a key role in the effectiveness of approaches to continuous improvement (CI). Despite substantial research, the understanding of such organisational cultures is still limited. Prevalent research practice is characterised by pre-defined models of culture and data from a single informant per participating organisation. Culture is only viewed in terms of its desired managerial *outcomes* rather than its *origins* in the workforce. It is reduced to a de-contextualised variable and studied without consideration of the societal culture in which the organisation is embedded.

To address these shortcomings, this thesis studied organisational cultures of CI in terms of the meanings shared by the workforce. It used multiple, in-depth case studies to attain systematic comparisons between work groups of high CI maturity, with Toyota being the main case organisation. The cases were substantially matched and located in polar Western settings of New Zealand and Spain, pursuing patterns of literal and theoretical replication. The attribution of meaning was analysed both in terms of the individual's internalised value orientation (social self-concept) and the group contexts.

The results indicate that the meanings individuals ascribe to practices and concepts of CI are aligned with their internalised values. Likewise consistent with cultural theory, CI practices and concepts were perceived as meaningful if they fulfil self-motives of efficacy, enhancement or consistency. Four distinct effects through which meanings become shared were identified; namely self-selection, staff selection, behavioural embedding and socialisation.

The new perspective that this study provides is able to explain the need for practices such as empowerment, involvement and systematic feedback and thus makes a contribution towards understanding the essential features of cultures of CI across cultural boundaries. The findings have immediate implications for organisations: Instead of aiming at abstract 'cultural change' towards an allegedly ideal culture profile, organisational leaders should impart CI practices and concepts in ways that

focus on the implicit value for employees; that is, convey a sense of relevance, competence and coherence to them.

Acknowledgements

I would like to thank the many friends for their help and inspiration, as well as all the participants in this study for showing genuine interest and support for the research.

Particularly I would like to thank Associate Prof. Nigel Grigg for his unobtrusive guidance, Simon Barnett, Jordi Guijarro, Warwick Harvie, Juan Jose Maldonado, Peter Manning, Enoch Ruhigira and Geoff Russell for their dependable support and Ester for her encouragement and help throughout the project.

My grateful thanks also to Mrs. Petra Alefeld, Dr. Mike Bebb, Prof. emerita Marilyn Brewer, Prof. Lawrence Corbett, Dr. Robin Mann, Prof. Joanne Martin, Mr. Musli Mohammad, Prof. Sonja Sackmann, Prof. Maggi Phillips and Prof. Ralph Stablein for their advice.

I gratefully acknowledge Education New Zealand for the financial support provided.

Finally, my grateful thanks to the Massey University Human Ethics Committee for granting human ethics approval for the field work (Southern A - 09/26).

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List of Abbreviations

| | |
|------------|--|
| CI | Continuous Improvement |
| CVF | Competing Values Framework |
| I-C | Individualism-Collectivism dimension of cultural variation |
| JIT | Just-in-Time Production |
| KPI | Key Performance Indicator |
| MPB | Case study Multipueblo Barcelona, Spain |
| NZ | New Zealand |
| OC | Organisational culture |
| OM | Operations Management |
| OS | Organisation studies |
| QM | Quality Management |
| SC | Societal culture |
| SIS | Staff Improvement System (used at work group TTH) |
| TMD | Case study Toyota Madrid, Spain |
| TST | Twenty Statements Test |
| TTH | Case study Toyota Thames, New Zealand |
| TPN | Case study Toyota Palmerston North, New Zealand |
| TPS | Toyota Production System |
| TPM | Total Productive Maintenance |
| TQM | Total Quality Management |
| TW | Toyota Way |
| WAT | Workshop Analytical Tool |

1. Introduction

If the human brain was simple enough for us to understand, we would still be so stupid that we couldn't understand it.

(Gaarder, 1996, p. 276)

1.1 Problem Statement

The concept of kaizen or continuous improvement¹ (CI) was considered one of the keys to Japan's economic development and outstanding competitiveness (Imai, 1986) in the second half of the 20th century and has been shown to contribute to operational performance across cultures (e.g. Ni & Sun, 2009). Today, management approaches that are built around the concept of CI such as ISO 9001, Six Sigma, TQM or Lean Production can be found routinely in operations around the world.

An organisational culture that is conducive to CI has been identified as a key element in the effectiveness of such approaches (Gerhardt, 2008), the "primary determinant of change and improvement" (Ahmed, Loh, & Zairi, 1999, p. 433) or even a crucial intangible asset and essential source of competitive advantage (Bessant, Caffyn, & Gallagher, 2001). In this thesis the term "culture of CI" is used to signify an "organizational culture that constantly guides organizational members to strive for continuous improvement" (Ahmed, et al., 1999, p. 426). The term implies that employees embrace CI as a core principle of working and engage actively in the organisation.

However, despite substantial research, the understanding of such organisational cultures is still limited and continues to be "an important agenda for future studies" (W. Lewis, G., Pun, & Lalla, 2006, p. 982). Studies that attempted to determine the features of an organisational culture that is conducive for CI have delivered unclear or

¹ Continuous improvement or kaizen is the abstract principle behind Japanese quality-centred management approaches (Imai, 1986). It is used in the present study as an umbrella term to describe core aspects of initiatives such as TQM (Total Quality Management), Lean Production or Business Excellence.

even contradictory results, particularly when considering a cross-cultural perspective. Klefsjö, Bergquist and Garvare (2008) stated:

It is not certain that neither TQM, nor the TQM values with Japanese under-tones, or six sigma with its American background, could seamlessly suit organizations in other parts of the world, or even suit the culture of a neighbouring firm in similar branches. Managing quality involves a cultural change, a difficulty which seldom is given enough attention. (p. 123)

On closer inspection, much of existing research is characterised by the use of distant and reductionist methods such as postal or online surveys that are based on pre-defined models of culture and data from a single informant per participating organisation. Three of the most striking shortcomings of this research practice are:

- a) This (*functionalist*) perspective is solely concerned with the function of an organisational feature and not its origins (Scott, 2003). Therefore it views culture in terms of its desired managerial *outcomes* (e.g. “customer orientation”, “focus on process” or “agility”) rather than its *origins* in reference to the values, meanings or assumptions shared by the workforce - although these are central in the culture construct.
- b) The use of pre-defined frameworks reduces culture to another organisational variable that is viewed in isolation from the organisational context, despite the increasingly acknowledged importance of context for the effectiveness of CI.
- c) As a result of this de-contextualising perspective, the organisational culture is studied without consideration of the surrounding societal culture. This flies in the face of ample evidence from cross-cultural management research that shows that the societal culture has a strong impact on the organisation-level culture.

1.2 My Interest in the Topic

My interest in the role of culture for CI grows out of my personal work experience of international project work involving people from a wide range of different cultures. I personally agree with writers such as Bessant and colleagues (2001) who assert that

failures of CI programmes are often due to an underestimation and a lack of understanding of behavioural aspects underlying CI.

I realised that things are being done very differently in different countries or branches of the same international corporation, and that none of these approaches – contrary to my knowledge at that time – is immediately obvious as intrinsically superior. As opposed to my previous training as an industrial engineer I realised that the “soft” side of operations, i.e. behavioural and cultural aspects, played an immense role in the success of new manufacturing projects – aspects that my professional training had covered only sporadically.

1.3 Aim

The aim of this thesis is to explore the meanings shared by organisational members that constitute organisational cultures of CI².

1.4 Overview of the Study

To achieve this aim, the following Literature Review Chapters 2 and 3 examine the literature on the role of culture for CI. While Chapter 2 reviews the current body of knowledge with regard to both the societal and organisational culture, Chapter 3 scrutinises the underlying assumptions of dominant research practice in Operations Management (OM) and Quality Management (QM) by drawing on a rich body of knowledge from both organisation studies (OS) and cross-cultural psychology.

This sets the stage for Chapter 4 in which I conceptualise the culture construct. This part is paramount as it defines the theoretical foundations of the present study and outlines the contribution it attempts to make. It starts with the development of a conceptual definition of culture and continues to discuss the resultant ontological, epistemological and axiological positioning of the present study. A sound conceptual understanding of the culture construct permits the formulation of precise research

² This aim reflects the conceptualisation of culture as a shared meaning system, see Chapter 4: “Conceptualisation of Culture” for more details.

Chapter 1: Introduction

questions that will guide the remainder of the study (see Figure 1).

Chapter 5 first describes the overall research design and the rationale behind it and consequently details the data gathering methods and analysis. Chapter 6 “Case Design and Selection” delineates the grounds for the selection of the cases and describes the cases and their socio-cultural contexts. The following “Results” Chapter presents the main body of evidence from the case studies.

In Chapter 8 I discuss the findings in the light of existing theory along with some supporting evidence and examine their limitations and generalisability. Chapter 9 provides the main conclusions from the study. The final Chapter 10 concludes the thesis with reflection on the research process. An overview of the chapter structure is displayed in Table 1.

Toyota has collaborated closely in this project as the main case organisation. It was identified as an ideal partner both as a multinational corporation and because its corporate philosophy (“The Toyota Way”) can arguably be considered prototypical of a CI culture (Liker & Hoseus, 2008).

Chapter 1: Introduction

Table 1: Thesis overview

| Chapter | Content | Function |
|--|--|--|
| 1. Introduction | Outline of aim, objectives and overview of study. | Part 1: Introduction: Problem, aim, general approach, thesis overview |
| 2. Literature review I: Current body of knowledge | Outline of current state of knowledge | Part 2: Background: Overview over body of knowledge and underlying assumptions, current theory and practice |
| 3. Literature review II: An Analysis of Underlying Assumptions | How is the understanding of culture tied up with the method of enquiry? What are the epistemological and ontological assumptions of existing research? | |
| 4. Conceptualisation of Culture | Conceptual definition of culture, ontology, epistemology and axiology of present study | |
| 5. Research Design | Description of case study approach and sequence of interlinked methods and data analysis | Part 3: Own work: Design of own study, research design, results. |
| 6. Case Study Design and Selection | Rationale for selection and description of case studies | |
| 7. Results | Presentation and analysis of the key meanings that constitute the group cultures of CI of the case studies | |
| 8. Discussion and Limitations | Discussion and linking to literature, comparing results with previous research, discussion of limitations | |
| 9. Conclusions | Contribution to knowledge, suggesting future research and implications of study for organisations | Part 4: Synthesis: contribution to knowledge, understanding of topic, examination of results, comparing results with others' |
| 10: Reflections | Reflections on the research process | |

(The overall structure follows the suggestions of Evans and Gruba (2002), see 3rd column)

Figure 1 illustrates the relationship between research aim, questions and objectives within the structure of this thesis: The literature is conducted based on the general research aim; the research questions are a result from the literature review and inform the objectives, which, in turn, guide the remainder of the study until the conclusions.

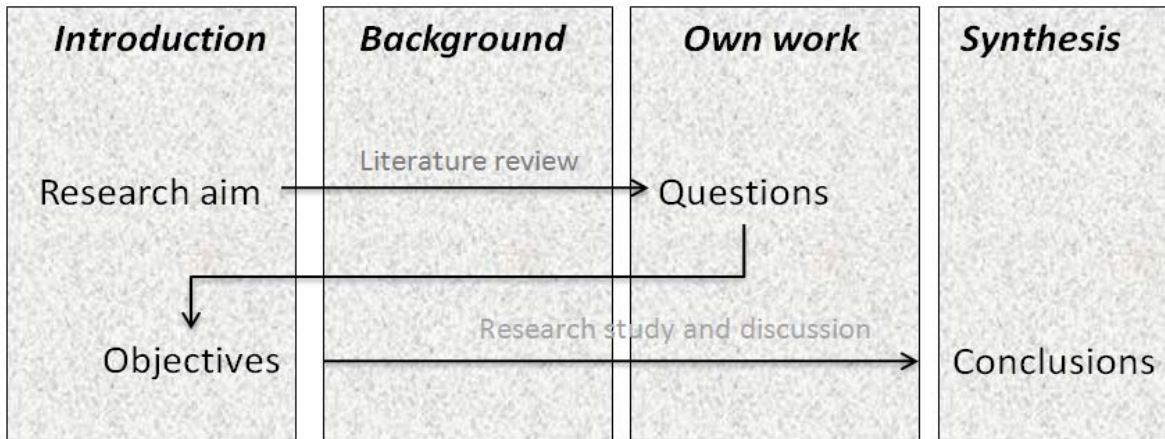


Figure 1: Logical links between research aim, questions and objectives underlying this study.

1.5 Research Questions

1. How does CI become meaningful to individuals and what are the key themes of the meanings underlying CI?
2. What are the conditions and organisational features that assist in or constrain the development of these meanings?
3. What are the processes through which these meanings are shared and ultimately become a group's culture?
4. How do these shared meanings guide action toward CI and which role does a corporate philosophy play in that process?
5. How does societal culture impact the shared meanings in organisations?

1.6 Objectives

The following objectives were defined for this study.

1) *Evaluation of existing research:*

- a) Summarise the existing body of knowledge on the role of culture for CI.
- b) Critically analyse how the underlying meta-theoretical assumptions delimitate this body of knowledge.

2) *Conceptual and empirical work:*

- a) Based on this analysis, propose an alternative theoretical perspective.
- b) Develop a robust research design that is capable of exploring the individual and shared meanings of organisational members.
- c) Conduct a study in accordance with this research design.

3) *Research outcomes:*

- a) Develop the themes of the meanings underlying CI from the empirical study.
- b) Describe the necessary conditions and organisational characteristics that enable these meanings.
- c) Acquire insight into the processes of how meanings are shared within a group.
- d) Explain how shared meanings guide action toward CI.
- e) Determine universal and context-dependent aspects of the groups' meaning systems in relation to societal culture, using cross-case analyses.

1.7 Scope

The construct of culture is immensely interdisciplinary, connecting diverse fields of psychology and anthropology with OM, QM and OS. It is therefore difficult to define the scope of this study using boundaries of scientific disciplines. However, some exclusions can be made in terms of the industries: Service industries such as education or health are not part of this study.

Chapter 1: Introduction

Furthermore, this study makes no effort to “change” the organisational cultures studied – on the contrary, it tries to leave them as intact as possible. Therefore a discussion of the possibility, limitations and means of culture change are not part of this study.

Moreover, this study is not designed to make generalisations about the link between culture and performance – this has been investigated elsewhere (e.g. S. K. J. Lee & Yu, 2004; Naor, Goldstein, Linderman, & Schroeder, 2008; Ni & Sun, 2009).

1.8 Language Conventions

As Lincoln (1990) aptly argued, convention of the “scientific” language such as the use of the passive voice

separates the knower from the known and places science squarely in the domain of distanced disinterestedness. Its very remoteness and passive voice play a barrier between the researcher and the researched that strategies for ensuring validity could not achieve alone. (p. 85)

Moreover, by linguistically “removing” the researcher from the research process, it makes the obtained knowledge appear value-neutral, supposedly objective and transcendent, as if existing independently from the researcher.

Parts of the study in which the researcher plays an important role are therefore explicitly identified through the use of the first person singular. I follow the advice of Evans and Gruba (2002) and specifically use the first person singular in the following situations: (a) when I make reference to personal experiences or to my role in the research process, (b) when I state personal opinions that should be highlighted as such, and (c) when I explain choices I made in the research process. Otherwise the structure and presentation of this manuscript has been guided by APA 6th (American Psychological Association, 2010).

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In other instances I refer to the researcher using personal pronouns in the *male* form. Participants on the other hand are being referred to in the *female* form, regardless of whether the actual participant is male or female. This does not only smoothen the writing, but also helps preserving the anonymity of the participants – sexual discrimination is not intended.

On a related note, research in culture is often accompanied by an own set of vocabulary, which often deviates from the normal language use in OM/QM. Therefore I ask the reader for some patience if they encounter unfamiliar words or concepts. I have added a Glossary at the end of the thesis with the purpose of facilitating the reading.

Chapter 1: Introduction

2. Literature Review I – Current Body of Knowledge

This and the following chapter review current theory and research practice regarding the role of culture in CI. Both culture and CI are, each taken alone, very interdisciplinary, comprehensive and multifaceted fields. Taken together, they offer an extremely wide range of applications and theoretical perspectives. The review, therefore, does not constitute an exhaustive summary of all contributions, but works to position the present study in the “big picture” of current research through representation of prototypical contributions. Due to the interdisciplinary nature of culture, not all contributions reviewed here are neatly located in the same body of literature, and so the review spans a relatively wide range of different academic outlets.

The review works on two levels. In the first part, I will review the current state of knowledge of the role of culture for CI. This is followed by a second part in the next chapter, in which the review will focus on the philosophical assumptions underlying this body of research. With the help of insights from other scientific disciplines, most notably OS and cross-cultural psychology, I will scrutinise current research practice.

Two distinct streams dominate the research into the role of culture for CI in organisations. The first perspective focuses culture within organisations, while the second perspective investigates the socio-cultural context of organisations as an external constraint or a contingency variable to CI. The structure in each part of this review is aligned to these two main themes: Organisational and societal culture.

2.0 Introduction and Overview

This chapter begins with a working definition of the key terms, which is followed by a short characterisation of conceptual and historical commonalities and differences between the “CI movement” and the “organisational culture movement”.

Next the review examines *conceptual* studies that postulated a relationship between the culture of an organisation and CI. Then I examine *empirical* studies that investigated the role of organisational culture¹ for CI.

In the following section the review moves on to the level of societal culture and examines both conceptual and empirical studies that investigate societal culture as an external constraint or contingency variable for the organisation. It closes with some concluding remarks about the current body of knowledge.

2.1 A Working Definition

The Quality Management (QM) body of knowledge is assumed to be largely a subset of the general Operations Management (OM) body of knowledge (Pilkington & Meredith, 2009).

As illustrated in Figure 2 the concept of CI is often applied within but not limited to the context of quality improvement. Since CI does not only apply to QM but also general efficiency improvement, CI concepts such as Lean Production are mostly part of the OM body of knowledge.

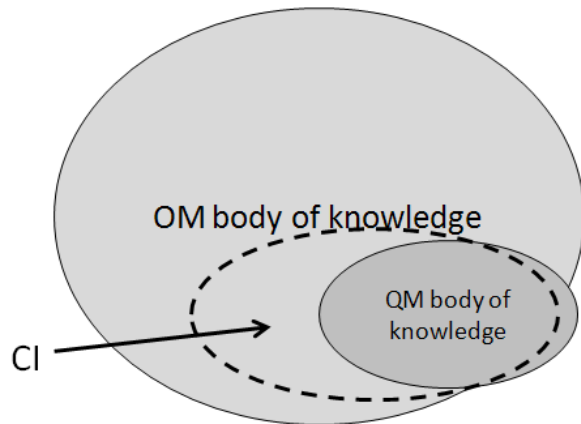


Figure 2: CI as part of the OM/QM body of knowledge

¹ The term organisational culture is treated synonymously for corporate, firm, organisation or company culture.

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Scholars have generally acknowledged the importance of QM beyond a technical tool (Rungtusanatham, 2001). Indeed, many scholars point at the "central role of organizational culture in the TQM approach" (Gallear & Ghobadian, 2004, p. 1062). Also scholars outside the QM/OM field have acknowledged the importance of organisational culture for CI (for instance, Hamada, 2000; Naveh & Erez, 2004; Weick, 2000).

The majority of the reviewed contributions centred on the TQM approach, while contributions regarding other CI approaches such as Lean Production or Six Sigma were less common. Therefore, although this review is concerned with the role of CI approaches in general, TQM will be the dominating theme.

Both the terms "quality" and "culture" lack a generally accepted definition. Not surprisingly, the term "quality culture" is used often but imprecisely in the literature. Some authors use the term with reference to the aspects of an organisational culture that relate to quality – whether good or bad. Saraph and Sebastian (1993), for instance, define a quality culture as "the core values possessed by employees and management regarding quality" (p. 73), whereas Kujala and Lillrank (2004) consider it "the theoretical foundation of quality management" (p. 53). Many other authors use it as an "ideal" culture for quality in the sense of Alvesson and Sweningsson's (2008) "hyperculture" (p. 161).

I will use the term "culture of CI" instead. In this regard Yokozawa, Steenhuis and de Bruijn (2010) argued that "kaizen can be defined as the mentality of employees where they try to continuously improve the company's performance even when it is not part of their job description" (p. 1). For the time being, *a culture of CI can be understood as an organisational culture which fosters behaviours toward CI in an organisation. As opposed to tools and techniques, it refers to the ideational level of meanings, assumptions and understandings held by employees. This tentative conceptual definition will be refined once the concept of organisational culture has been explored in more detail in the following chapter.*

2.2 Continuous Improvement and Organisational Culture

The role of organisational culture has received significant attention in the literature of CI. Past research has left little doubt that the meanings, values, beliefs, assumptions or understandings held by members of an organisation play a key role for the sustained effectiveness of CI. A conducive organisational culture is often seen a pre-requisite for successful CI in an organisation; Juran, for instance, argued that it required “a good deal of cultural change” (as cited in Spencer, 1994, p. 461). Culture (or the change thereof) is assumed to be a key element in the successful implementation of CI programmes (Vermeulen, 1997) and organisational performance (Lloréns Montes, Verdú Jover, & Molina Fernández, 2003).

Therefore it does not come as much of a surprise that “cultural mismatches” (Cassidy, 1996, p. 24) and the “inability to change organizational culture” (Masters, 1996, p. 53) ranked among the top stated reasons for the failure of TQM programmes in the past. Similarly, some argued that TQM fails because it does not adequately address the necessary cultural change in the organisation (Cao & McHugh, 2005).

Since the beginning of the 1980’s (most notably, Deal & Kennedy, 1982; Ouchi, 1981; Peters & Waterman, 1982; Pettigrew, 1979), there has been extensive work on the topic of organisational culture. The attention in the field of OS has subsided somewhat in the 1990s (Martin, 2002), but ongoing publications and reprints show a sustained interest in the topic. In OM/QM research in particular, recent publications as well as dissertations underpin its importance.

Organisational culture is a complex subject; there are a great many different theoretical perspectives and ways to organise the topic. What follows is therefore not an exhaustive review; this has been done elsewhere (e.g. D. Lewis, 1996a, 1996b) and would justify a doctoral thesis in its own right.

2.2.1 Culture and CI – Commonalities and differences

It is important to note that the “natal hour” and heyday of organisational culture and QM coincided largely in the 1980s. The emergence of both movements is best seen in the light of the realisation by American companies of the superiority of Japanese competitors at that time (Morgan, 2006). Foundational works of the culture movement such as the work of Ouchi’s (1981) “Theory Z” or Peters and Waterman’s “In Search of Excellence” (1982) are still frequently cited in both culture and CI-related publications. This section works to explain the commonalities and differences between the two theoretical perspectives.

Both culture and quality/CI emphasise the importance of holistic and comprehensive perspectives on organisation. In turn, their boundaries are not clearly defined. In fact, the emergence of both culture and the quality movement can be regarded as a reaction to the failure of existing mechanistic approaches to organisation, or rather the study thereof.

Much of the momentum of the culture movement in OS originated from “a growing dissatisfaction with traditional research efforts, especially those grounded in essentially the positivistic views of organizations” (Louis, 1983, p. 39). Similarly, QM was deemed a “revolution in management” (Ishikawa, 1985). In OS the cultural perspective offered the opportunity to break out of the established mainstream, while the emerging quality movement provided an opportunity for a more holistic understanding of organisations. Put differently, both looked at the organisation in an unconventional and perhaps even fundamentally new way, thus enabling new insights but also causing resistance from the established fields.

Both culture and CI went through an early phase with exciting new insights and much attention from both practitioners and academics in the 1980s. This was followed by a phase when other scholars gradually entered the respective field and brought with them their more conventional research practice. For instance, this led Calás and Smircich, who made some of the most profound foundational contributions in cultural

research in the early 80s to state that organisational culture was “dominant but dead” (Calás & Smircich, 1987) by 1987.

Arguably, a cultural perspective essentially views culture as “root metaphor” (Smircich, 1983a) of an organisation, rather than one of many organisational variables. This has parallels in the quality movement, where quality is presented as a general way of organising (e.g., Deming, 1986), involving everybody in the organisation. Business Excellence frameworks that took up the quality and CI approach, such as the Malcolm Baldrige Award reflect this holistic approach which goes far beyond quality prescriptions (Jayamaha, Grigg, & Mann, 2008; NIST, 2010).

Both quality and culture are ambiguous and imprecise concepts. Kroeber and Kluckhohn (1963) listed as many as 164 different definitions of the term “culture” in the field of anthropology – and this was before the heyday of the culture movement in OS in the 1980s. The use of the term “culture” ranges from a mechanistic notion and interchangeably with “management system” (as in Mann, 2009) to the metaphorical use of the “more expressive social tissue around us that gives... tasks meaning” (Pettigrew, 1979, p. 574). Likewise, the term “quality management” is used for anything between a “toolkit” and an “integrated set of and mutually compatible basic assumptions” (Kujala & Lillrank, 2004, p. 43) and therefore has no “generally accepted definition or agreed content” (Foley, 2004, p. 21).

Perhaps the fact that both QM and culture are highly interdisciplinary is the reason why neither of them fitted neatly into existing scientific disciplines. For instance, Deming (1986) combined (psychological) motivational aspects with organisation strategy, leadership theory, statistics and industrial engineering. This unconventional approach evoked efforts by quality theorists to prove the validity of the claims, such as by Anderson and colleagues (Anderson, Rungtusanatham, & Schroeder, 1994; Anderson, Rungtusanatham, Schroeder, & Devaraj, 1995) or Samson and Terziovski (1999). Actually, due to the fact that QM did not fit well in any of the established management research disciplines it “is not universally or even widely accepted” (Foley, 2004, p. 21) today. Similarly, culture is an interdisciplinary phenomenon with

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contributions from intellectually very diverse disciplines such as OS, sociology, anthropology or social and cognitive psychology (D. Lewis, 1998).

As diverse as the topic areas covered by both culture and quality, so are the research practices associated with it. While cognitive psychology applies strongly experimental and deductive (positivist) methods (e.g. Erez & Somech, 1996), anthropological studies of culture heavily rely on inductive, ethnographic (interpretive) approaches (for instance, Geertz, 2008). When OS started to use “culture” to examine the functioning of organisations, scholars adopted more interpretive methods, while later researchers often tended more toward positivist approaches (D. Lewis, 2002). The dispute around “adequate” research practice in cultural research in OS caused what would become known as the “paradigm wars” (see Denison, 1996; Martin & Frost, 1996). While the “deep disagreements about fundamental issues” (Martin, Frost, & O'Neill, 2006, p. 726) remain, the intensity of the debate has subsided (Martin, et al., 2006). Likewise, the adequacy of research practices in OM/QM research is a strongly debated topic (Hill, Nicholson, & Westbrook, 1999). In conclusion, in both fields there seems to be somewhat a dividing line between different camps in terms of research practice.

Both quality and culture combine “soft” and “hard” issues; QM spans domains as different as statistical process control and underlying, unconscious assumptions of a quality culture (Kujala & Lillrank, 2004). Similarly, culture is sometimes conceptualised in direct reference to behaviour (“the way we do things around here”) but more often refers to the ideational level of understandings, assumptions, meanings, or symbols.

Scholars of both culture and CI attribute different levels of tangibility to their subject matter. For example, Schein uses his widely-know onion model to conceptualise culture as consisting at its core of subconscious, deeply held assumptions. One level up, there are the espoused cultural values and at the surface the observable artefacts and behaviours (see Figure 3).

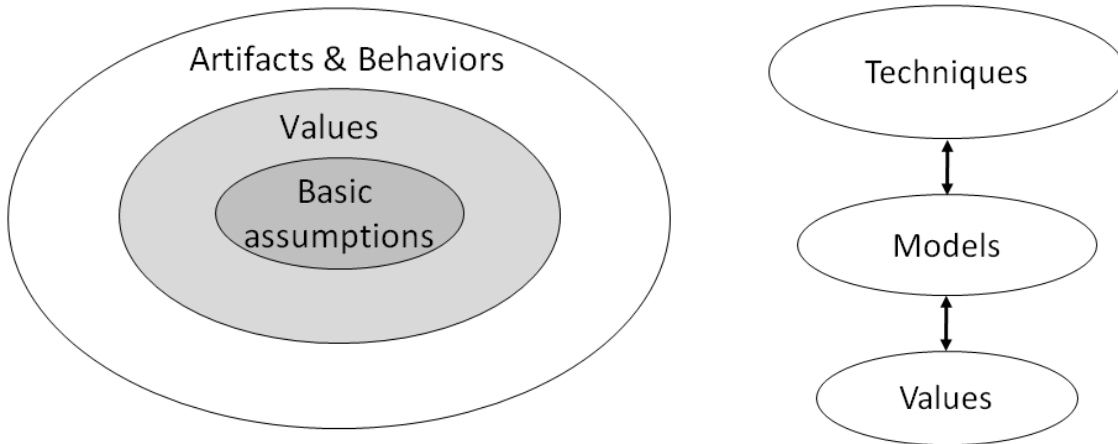


Figure 3: Schein's onion model of culture (left-hand side; source: Schein, 1985) and levels of QM (right-hand side; source: Lagrosen & Lagrosen, 2006)

Similarly, Hellsten and Klefsjö (2000) describe QM as a management system consisting of values, tools and techniques. Also describing multi-level qualities in terms of tangibility, Lagrosen and Lagrosen (2006) depict the levels of QM as displayed on the right hand side of Figure 3.

Culture and quality are considered to be both cause and effect (Denison, 1990, p. 176) in an organisation – both vehicle and precondition of organisational change at the same time. They both served as an explanatory variable for organisational performance (see for instance, Denison, 1990; Denison, Haaland, & Goelzer, 2004; Flynn, Sakakibara, & Schroeder, 1995; Naor, et al., 2008; Ni & Sun, 2009).

Finally, and perhaps most importantly, there seems to be a considerable conceptual overlap between the QM and the cultural view on organisations. Madu (1997), for instance, states boldly “quality itself is a culture” (p. 279). Spencer (1994), on the other hand, approaches the conceptual overlap in a more sophisticated way. She examines the TQM construct from the viewpoint of the mechanistic, organismic and cultural models of organisation and concludes that, “when viewed as a philosophy or cultural change [as opposed to a mere set of procedures or tools] TQM has much in common with the cultural model” (p. 466).

Empirical research of Gallear and Ghobadian also confirms the “existence of a significant overlap between culture and TQM” (2004, p. 1060) in values and “way of working”. Lewis (1996a), on the other hand, argues that TQM and culture have different origins but the two perspectives merged eventually into the idea of “excellence” that can be achieved through cultural change. Similarly, Yokozawa, Steenhuis and de Bruijn (2008) make out a considerable amount of cultural elements within the concept of CI.

In conclusion, organisational culture and CI are perhaps best understood as inseparable terms: The purpose of CI initiatives such as TQM is to transform the organisation toward a “culture of CI” and effective CI requires a “conducive” organisational culture. As Ni and Sun (2009) describe it “CI definitely needs and will consequently induce a complete change in pattern of behaviour and culture” (p. 1043).

2.2.2 Conceptual contributions toward defining a culture of CI

The features of an organisational culture that is conducive to CI is the subject of a stream of conceptual² research that I will review in this section. I will discuss several publications that, I think, can be seen as representative for a large number of conceptual contributions that tried to define a culture of CI.

Woods (1997), for instance, defines six values on which to “build a quality culture”, including “No subordinates or superiors allowed” or “Everyone has access to all information on all operations”. Organisational leadership is described as the main driver in implementing these values in the organisation’s culture.

² It should be noted that some of the papers listed here as “conceptual” also included empirical work. However, it was found that the conceptual contribution outweighs the empirical work and they are therefore listed as “conceptual”.

Similarly, Hellsten and Klefsjö (2000) delineate the values underlying TQM following largely Deming's (1986) system perspective, ranging from "Improve continuously", "Base decisions on facts" to "Top management commitment".

Saraph and Sebastian (1993) provide a list of "universally desired quality values" (p. 74) and differentiate between management, employee, supplier-related, and customer-related values. The prescribed management and employee values are detailed in Table 2. The values start with "Managers must believe in continuous quality improvement" and continue with "Zero defects should be every employee's goal" to "Continuous problem solving should be the norm". Although more detailed than Hellsten and Klefsjö, their message is virtually identical: It is a catalogue of claims of the organisation toward the employee with the purpose to ensure smooth running of the organisation with regards to quality and CI.

Detert, Schroeder and Mauriel (2000) first propose a framework of "generalised" dimensions of organisational culture. Based on this framework, they then postulate an "ideal culture" for TQM based on considerations of value congruence between the organisational culture and underlying values of TQM, as listed in Table 2.

Jabnoun (2001) differentiates between CI driving and CI enabling values, but the values he lists, such as "Respect", "Responsibility", "Empathy" and "Humbleness" show a notably different quality from the ones listed up to this point. While the previous values evidently served a direct purpose in the organisation, the ones listed by Jabnoun have an element of humaneness.

Using Schein's three-level cultural framework of assumptions, espoused values and artefacts, Kock (2009) defined a whole list of desirable "espoused values" for the implementation of TQM in a South African security company. On closer inspection these "values" are a mix of almost technical prescriptions such as "Quality through continuous improvement" and generalised humanitarian claims such as "Human rights" or "Social responsibility". Unfortunately the rationale for selecting these values is not explained and it remains unclear how these new "espoused values" are supposed to lead to cultural change. Lasting cultural change would, according to

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Schein (1985), require changing the core of culture, the basic assumptions (cp. Figure 3).

Finally, other contributions give rather vague de- (or pre-)scriptions such as “open culture” (Irani, Beskese, & Love, 2004, p. 644).

Table 2: Values underlying CI-related initiatives (conceptual approaches)

| Woods (1997) | Hellsten and Klefsjö (2000) | Detert et al. (2000) | Jabnoun (2001) | Kokt (2009) | Saraph and Sebastian (1993) | NIST (2010) core values and concepts |
|--|---|--|--|---|--|---|
| <p>We're all in this together: company, suppliers, customers.</p> <p>No subordinates or superiors allowed.</p> <p>Open, honest communication is vital.</p> <p>Everyone has access to all information on all operations.</p> <p>Focus on processes.</p> <p>There are no successes or failures, just learning experiences.</p> | <p>Top management commitment</p> <p>Improve continuously</p> <p>Focus on customers</p> <p>Focus on processes</p> <p>Base decisions in facts</p> <p>Let everybody be committed</p> | <p>Prioritizing the use of time leads to better results.</p> <p>Long-run vision should drive short-run actions.</p> <p>All work should be viewed, understood, and documented as a process.</p> <p>The organisation is an interconnected set of processes.</p> <p>Continuous improvement and innovation are a way of life.</p> <p>Decisions are made that are customer focused and customer driven.</p> | <p>CI driving values:</p> <p>Respect</p> <p>Responsibility</p> <p>Empathy</p> <p>CI enabling values:</p> <p>Humbleness</p> <p>Trust</p> <p>Openness</p> <p>Cooperation</p> | <p>Equality, opportunity and empowerment</p> <p>Excellence and innovation</p> <p>Integrity</p> <p>Quality through continuous improvement</p> <p>Human rights</p> <p>Honesty, reliability, discipline and loyalty</p> <p>Investment in human capital</p> <p>Professional and ethical business</p> <p>Open and honest communication</p> <p>Comprehensible internal company/client philosophy</p> <p>Human environment that allows for quality improvement</p> <p>Shared vision and identity</p> <p>Social responsibility</p> <p>Leadership and vision from the top.</p> <p>Active and visible participation from top management</p> <p>Involvement and commitment from all employees</p> <p>Diversity</p> | <p>Management values:</p> <p>Managers must believe in continuous quality improvement</p> <p>Managers must consider quality to be a strategic business variable</p> <p>Quality must be a central organisational value for managers.</p> <p>Line managers, rather than the quality staff organisation, are ultimately responsible for quality.</p> <p>Employee values:</p> <p>Every employee is responsible for the quality of his or her output.</p> <p>Every employee must strive to do things right the first time by understanding internal and external customer requirements.</p> <p>Zero defects should be every employee's goal.</p> <p>Every employee is authorized to stop production when it is not up to standards.</p> <p>Employee participation is very important in the quality improvement process</p> <p>Continuous problem solving should be the norm.</p> | <p>Visionary leadership</p> <p>Customer-driven excellence</p> <p>Organizational and personal learning</p> <p>Valuing workforce members and partners</p> <p>Agility</p> <p>Focus on the future</p> <p>Managing for innovation</p> <p>Management by fact</p> <p>Societal responsibility</p> <p>Focus on results and creating value</p> <p>Systems perspective</p> |

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It should be noted that most of the cited literature referred to the concept of TQM. There is a similar discussion with reference to other concepts that centre around the theme of CI, such as Lean Production. For instance, Pettersen (2009a) compares the philosophies and values underlying the TQM and Lean Production approaches and consequently urges practitioners to examine the organisational context with regard to values in order to increase the odds of successful implementations.

In conclusion, conceptual contributions mostly emphasise the universal applicability of CI values and thereby follow the ideological footsteps of the fathers of the quality movement. They reflect what Bright and Cooper (1993) described with reference to Martin's (1992) well-known typology of three cultural perspectives as an "integrationist" view, i.e. the organisational culture as an organisation-wide unified mindset that directs behaviour toward quality and CI. A culture of CI is conceptualised as something an organisation *has* (as opposed to *is*), and can be changed purposefully through management intervention.

The values listed in the above contributions have in common – with the notable exception of Jabnoun (2001) – that they are written from and for a managerial perspective. These values perform directly a **function**. More specifically, they perform a function for organisational purposes, rather than for the individuals that constitute the organisation. There is "nothing in it" for the common worker.

Put another way, there is little or no hint as to how they should be relevant to an individual or for what motive individuals should deeply internalise these values. Having said this, there is no shortage of advice as to how to "implement" a new culture through management or consultants, from an implementation model (S. Sousa & Aspinwall, 2010) to pointing at the importance of leadership, training, rules, policies, or recognition programmes. What remains is the feeling that the reflection of managerial interest in these values is painfully obvious and that the idea of "quality as organizational truth [that] is the outstanding emotive force which can unify everyone in the organisation" (Lascelles and Dale (1988), as cited in Bright & Cooper, 1993, p.

24) is rather wishful thinking. Later studies attempted increasingly to determine a culture of CI in an empirical way, which leads over to the next section.

2.2.3 Empirical contributions – The quest for an “ideal” cultural profile

While the previous section looked at *conceptual* contributions trying to define the core features of an organisational culture of CI, this section considers *empirical* studies. Generally these studies seek a profile of an organisational culture that is associated with high performance for initiatives of CI, such as TQM, Lean Production, or Six Sigma. Put another way, organisational culture is conceptualised as one of many factors whose ideal configuration for CI needs to be determined (see Figure 4).

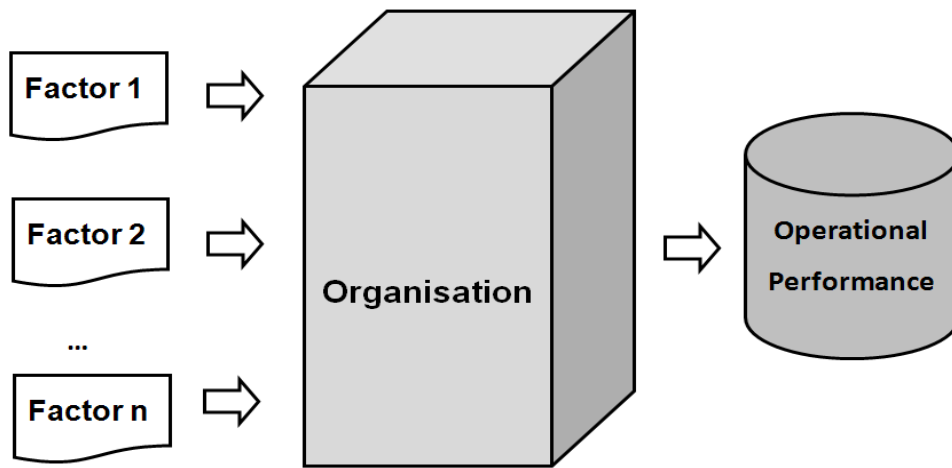


Figure 4: Implicit model of culture as one of several factors determining performance

There is no shortage of attempts to define the features of a culture of CI empirically. For this purpose the Competing Values Framework (CVF) has been used extensively by scholars in the field OM/QM. It is a model originally developed by Quinn and Rohrbaugh (1981) to measure organisational effectiveness and was only later applied to gauge organisational culture. It presumes that there are four basic cultural types (group, developmental, hierarchical and rational culture), which can also be present simultaneously in an organisation (see Figure 5).

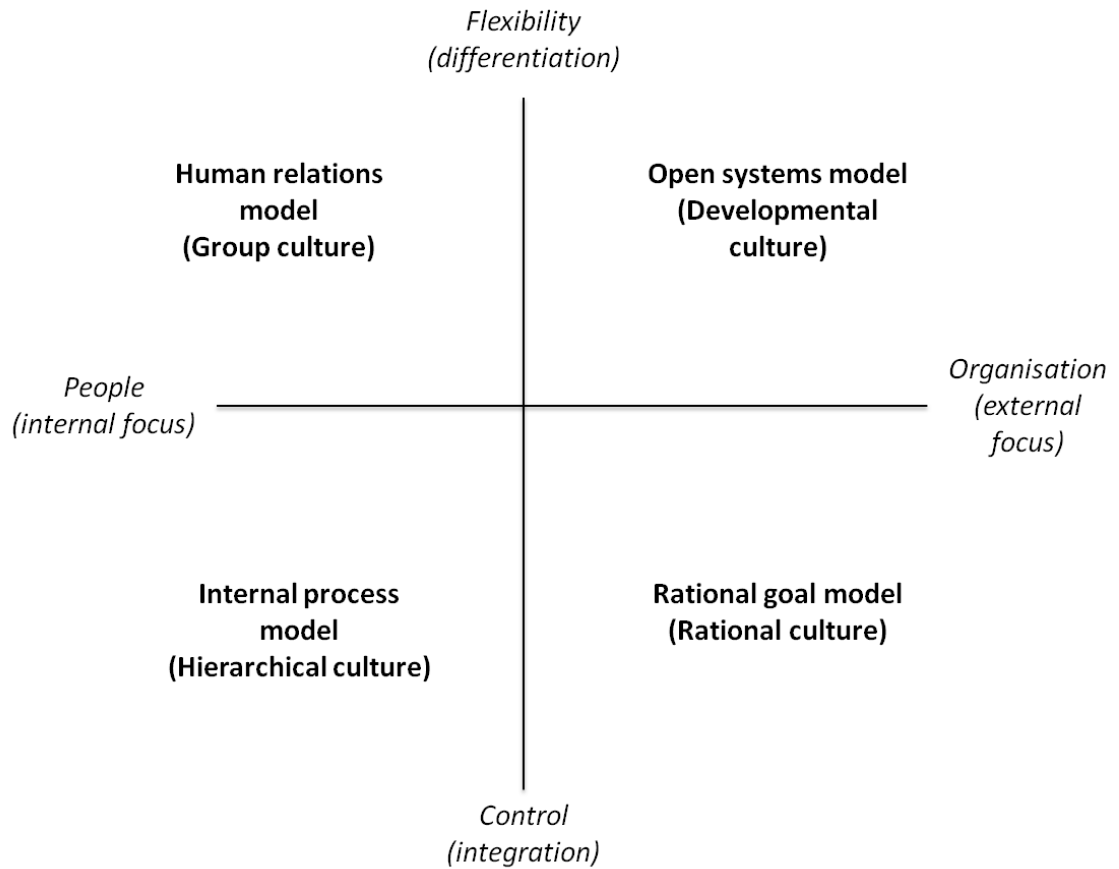


Figure 5: Cultural model underlying the CVF (adapted from Quinn and Rohrbaugh (1981, p. 136); in brackets variant terms used by more recent publications, e.g. Al-Khalifa and Aspinwall (2001, p. 420))

Most studies have specifically examined the implications of organisational culture for TQM. Consequently, I will focus on these studies to ensure comparability when discussing the outcomes.

Dellana and Hauser (1999) used the CVF as independent variable and criteria derived from the Malcolm Baldrige award as dependent variable to define a “quality culture”. Based on a sample of 219 US companies they concluded that developmental⁵ and group culture types tend to be linked to higher Baldrige scores.

⁵ They use the term “adhocracy” instead of the more common term “developmental”.

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Chang and Wiebe (1996) asked a US panel of experts in the field of QM to identify the ideal culture profile for the implementation of TQM. They came to the conclusion that such a profile consists of both developmental and group culture.

Like Chang and Wiebe before them, Al-Khalifa and Aspinwall (2000) questioned experts in QM, this time in the UK, and identified a blend of group and developmental culture as congruent with the TQM philosophy and facilitating its implementation.

However, in a recent study, Zu and colleagues (2010) found mainly rational and group culture types to be related to quality practices (US sample).

In a study involving organisations from a multitude of different countries (US, Germany, Sweden, Finland, USA, Japan and Korea, Naor, et al. (2008) found high levels of all culture types except hierarchical culture to be associated with the use QM (infrastructure) practices and performance. Unfortunately, Naor, et al. employed a set of completely distinct measurement items to operationalise the CVF and used culture as a second-order construct in their structural equation model so that inferences to actual cultural profile and the comparability to the previous studies is limited.

Differently again, a study of Singaporean organisations, Yong and Pheng (2008) found a “balanced and strong organizational culture” (p. 245) of all CVF cultural archetypes, what they labelled a “comprehensive” culture, to be most conducive.

In addition, in another study using the CVF based on a sample of organisations in Australia and New Zealand, Prajogo and McDermott (2005) highlighted the “significant relationship with certain practices of TQM” (Prajogo & McDermott, 2005, p. 1101) of yet another culture type, *hierarchical* culture.

Summing up, studies that used the CVF have yielded inconsistent or even contradictory results. Overall, the above cited studies highlighted the importance of *all possible* culture types for TQM in terms of the CVF.

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Despite methodological inconsistencies between studies, most notably the use of ipsative measurement scales⁶ in some studies as opposed to Likert scales in others, certain patterns are discernable: Studies located in identical or similar socio-cultural settings and respondents with similar characteristics yielded similar results. For example, Al-Khalifa and Aspinwall (2000), Dellana and Hauser (1999) and Chang (1996), all based in either the US or UK, i.e. cultures which typically cluster together in cross-cultural research (Hofstede, 1980a; House, Hanges, Javidan, Dorfman, & Gupta, 2004), have all identified group and developmental cultures as most conducive for TQM.

This indicates that the wider societal culture in which the surveyed organisations are embedded is likely to play a role. This is supported by evidence from cross-cultural management research that societal cultures impact on organisational cultures (for instance, Hofstede, Neuijen, Ohayv, & Sanders, 1990). Put another way, people from different societal cultures may apply quite different interpretations to the same practices in organisations.

A notable exception is the study of Sousa-Poza, Nystrom and Wiebe (2001) who investigated the cultural profile of organisations in *three different socio-cultural contexts* simultaneously, namely the USA, (Germanic) Switzerland and South Africa. They measured the cultural profile with the CVF and the level of TQM implementation using a carefully translated survey instrument.

They performed canonical correlation analysis to determine relationships between the organisational culture profile and the dimensions of TQM implementation in each country and identified a different “ideal” cultural profile for each country. Consequently they tentatively discussed the interplay between the societal culture and organisational culture and how this can help explain the divergent organisational

⁶ When ipsative measurement scales are used, respondents are asked to divide a certain number of points among different scenarios in the question. Thus respondents have to make decisions “either/or” and the score assigned to one scenario is dependent on the scores assigned to the other scenarios.

cultural profiles associated with TQM effectiveness in the different societal cultures. They concluded that “specific corporate cultures in different regions or countries have a different impact on the characteristics of the TQM implementation. In each of the countries, the relationships between the dimensions of corporate cultures and the dimensions of TQM implementation are different” (p. 755) and continued,

This study also shows that the relationships between corporate culture and TQM implementation do exist and are complex.... Furthermore, these relationships are different for each of the three countries. This implies that simple implementation strategies are not likely to be effective on a global scale, which is consistent with the experience of many firms. (p. 755)

The results that Sousa-Poza and colleagues presented are consistent with the advice of cross-cultural psychologists Earley and Erez, (1997). They advise organisations to use practices such as statistical process control, specific goals or benchmarking in the USA, while they deem quality circles or teamwork more suitable in the Swiss context.

2.2.4 Organisational culture – Some concluding observations

There is clearly no shortage of studies that investigated the relationship between TQM and the organisational culture, both conceptually and empirically. Some scholars view TQM itself as a cultural phenomenon. This might be due to similar histories of origin or conceptual overlaps between the concept of quality/CI and culture.

Whether it is conceptual work like that of Detert, et al. (2001), or the multitude of empirical studies that used the CVF to determine a culture of CI, they all have in common an integrationist view on organisational culture (Martin, 1992, 2002) – there is only room for one culture per organisation.

Moreover, like the conceptual contributions, virtually all empirical contributions apply a universalist approach to culture – there is exactly one “ideal” cultural profile. Considering the largely deviant results of the different studies, perhaps it is timely to question this implicit assumption of “one best way” or, more precisely, “one best organisational culture” to supplement CI, i.e. the “culture-free” position.

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Conclusions like “characteristics of specific corporate cultures seem to provide a facilitating function for some dimensions of TQM while deterring for others” (Sousa-Poza, et al., 2001, p. 755) show that our understanding remains rather tentative. Moreover, the contradictive “ideal” profiles in the reviewed studies provide us with no clear answer as to what the features of a culture of CI are. Divergent “ideal” cultural profiles that emerged in studies located in different socio-cultural context show that we know surprisingly little substantial despite several decades of research.

Indeed, Klefsjö and colleagues have summed up the state of knowledge by stating that “it is not certain that neither TQM, nor the TQM values with Japanese under-tones, or six sigma with its American background, could seamlessly suit organizations in other parts of the world, or even suit the culture of a neighbouring firm in similar branches” (Klefsjö, et al., 2008, p. 123). Similarly, Kull and Narasimhan (2010) recently stated that “what remains unclear is how quality practices interrelate with cooperative values” (p. 82).

Perhaps rightly so, a great number of scholars are critical about profound and lasting cultural change as a result of managerial interventions in organisations (Ogbonna & Harris, 1998). Despite many claims to use CI as a vehicle of cultural change, there is a paucity of empirical research that addresses this issue. Sinclair and Collins (1994) managed to put it in a nutshell: “In promoting culture change, the underlying belief of management... would appear to be that organizations have cultures which exist largely in isolation from society generally and can be explicitly managed to bring about desired changes in attitudes, values and behaviours in order to achieve business success” (p. 22).

By implication, if organisational cultures cannot not be shaped at discretion of management, it seems more advisable to understand how to manage *with* cultures, not to manage cultures. It is therefore legitimate to ask for studies that also examine the role of societal culture. This leads over to the next part of the review.

2.3 Continuous Improvement and Societal Culture

I now move on to consider studies that investigate societal⁷ culture for practices of CI. In reviewing the literature, I touch upon related fields of theory, namely contingency and institutional theory. While I will not fully explore the theoretical position of these frameworks, it is important to include them in this review for a sound positioning of the present study.

Generally, there are relatively few studies within the OM/QM body of knowledge examining societal culture so that many of the cited studies are actually located outside the “traditional” outlets. As noted by Pagell, Katz and Sheu (2005), researchers in OM have only recently begun to acknowledge the importance of societal culture.

Studies that do examine CI in the light of societal culture mostly do so in reference to Hofstede’s (1980a, 2001) framework of national culture. It has clearly dominated cross-cultural research in the past three decades (Kirkman, Lowe, & Gibson, 2006) will therefore be introduced shortly here.

The first edition of Hofstede’s book “*Culture’s Consequences*” (1980a) was published in 1980 and presented four universal dimensions of national culture, based on more than 100,000 survey responses obtained from employees of a worldwide operating company in the late 1960s and early 1970s. The fifth dimension was found later in a study using a questionnaire designed by Chinese scholars and added to the initial set of four (Hofstede & Bond, 1988).

- **Individualism versus Collectivism (I-C)** is the dimension that characterises the degree to which individuals are integrated into groups. The ties between

⁷ The terms ‘societal’, ‘ethnic’ and ‘national’ and ‘country’ culture are treated synonymously for societal-level culture in this thesis although I acknowledge that they use a different frames of reference for group-inclusion; “national” uses the nation-state as criterion for inclusion, while “societal” permits a more fine-grained differentiation such as in language groups (as applied in House, et al., 2004) or ethnicities within a nation-state. Throughout this thesis I use the term “societal culture” while maintaining the original terms when referring to other scholars’ works when it adds clarity.

members of individualistic cultures are looser than between members of collectivistic cultures. These bonds within groups or extended families offer belonging and protection but demand loyalty in return.

- **Power Distance** is a measure for the extent to which people accept and expect power to be distributed unequally in a society.
- **Masculinity versus Femininity** refers to the distribution of roles between the genders. In feminine countries both women and men share modest and caring values, whereas Masculinity refers to assertiveness and competitiveness for men and - to a lesser degree – for women. As a result, in masculine countries the gap between men's and women's values is greater.
- **Uncertainty Avoidance** reflects the society's tolerance for uncertainty and ambiguity; it reflects the degree to which members feel comfortable in unstructured situations. Consequently uncertainty avoiding cultures try to minimize the possibility of uncertain situations by rigid laws and rules.
- **Long-Term Orientation versus Short-Term Orientation:** Long-term oriented cultures look for guidance in the future rather than the presence. Other values associated with long-term orientation are thrift and persistence; in organisations, long-term oriented cultures emphasise the building of relationships and market position, whereas short-term oriented cultures stress fast results and the immediate “bottom line”.

Hofstede’s framework provides the basic means to frame cultural variation and is applied in both empirical and conceptual research on the role of societal culture for CI. I will first examine conceptual works to proceed to empirical studies in the following section.

2.3.1 Conceptual contributions – The concept of value congruence

One class of conceptual works investigate the value congruence of QM/OM concepts with societal cultures. According to many cultural theorists, societal cultures are

based on values, and thus cultural differences can be understood as value differences (Hofstede, 1980a). Based on the notion that many OM and QM concepts and practices are also inherently value-laden (e.g. Hellsten & Klefsjö, 2000; Jabnoun, 2001), scholars have hypothesised about the cultural compatibility of a given societal culture with CI (e.g. Kumar & Sankaran, 2007; Pun, Chin, & Lau, 2000) or defined an allegedly ideal culture profile for CI concepts (e.g. Jabnoun & Khafaji, 2005) in terms of universally applicable dimensions of culture.

Kumar and Sankaran (2007), for instance, conceptually compare facets of Indian culture and the values that supposedly underlie TQM, using Hofstede's (1980a) dimension of national culture as conceptual framework. Interestingly, they argue

Against the conventional wisdom in TQM literature that hierarchy is not conducive for TQM implementation and shown how in the Indian context, hierarchy, operationalised through the guru-shishya relationship based on the nurturance of subordinates can aid the learning orientation of organisational members and facilitate TQM implementation. (p. 186)

Similarly, Pun, Chin and Lau (2000) argued for a "culture-specific management system" (p. 336) in China. They investigated the differences between Anglo-American and Chinese culture and how they would affect the implementation of TQM in Chinese enterprises. In particular, they looked at the role of the individual within the group, in terms of Hofstede's dimensions of I-C and Power Distance. Interestingly, they also pointed toward the role of organisational cultures in resolving the seemingly inherent value conflict between TQM and national values.

In a similar vein, Psychogios and colleagues (2008) conceptually contrasted the Anglo-Saxon with different non-Anglo-Saxon socio-cultural contexts in terms of their adaption of TQM in order to examine the applicability of TQM in Greece. They identified two cultural forces in Greek society, namely "traditionalism" and "reformism" to be likely to affect the implementation of TQM in Greece. Supported by data from several interviews, they offered three different scenarios for the acceptance of TQM in the Greek industry he investigated: Rejection, acceptance and a

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contingency perspective. They suggested that the contingency scenario, i.e. not “adopting the whole package but the selective use of certain elements for maximum impact” (p. 168) was most likely to occur.

Lagrosen (2002) used the dimension of Power Distance and Uncertainty Avoidance of Hofstede’s (1980a) framework of national culture to explore findings from interviews in a multinational organisation in four different European countries. He comes to the conclusion that while the differences in practice between the observed countries are not huge, “there are some vital distinctions” (p. 282).

Another class of conceptual works defined an allegedly ideal culture profile for CI concepts in terms of universally applicable dimensions of societal culture. For instance, Jabnoun and Khafaji (2005) held that TQM is more suitable for cultures of low Masculinity, low Power Distance, and low Uncertainty Avoidance, in terms of Hofstede’s (2001) framework.

In contrast, Kumar and colleagues (2011) argued that high Collectivism, low Power Distance and low Uncertainty Avoidance were more conducive to TQM.

Anwar and Jabnoun (2006) hypothesised about the relationship between dimensions of societal culture and different aspects related to QM. Their “contingency model” suggests that different dimensions of societal cultures are conducive to quality assurance, quality control, CI and customer satisfaction, respectively. For instance, with regard to CI they suggested that a low level of Uncertainty Avoidance and a low level of Power Distance yield the best results. The parallels of this class of study with similar conceptual studies that hypothesise the ideal *organisational* cultural profile are obvious.

Summing up, most of the above conceptual studies are based on the notion of value congruence between CI practices and alleged values of societal culture. Hofstede’s framework of societal culture plays a salient role.

2.3.2 Empirical contributions

TQM's high failure rates increasingly raised doubts about its universal applicability and what followed were studies that looked at different aspects such as firm size, uncertainty, corporate support for quality, and also societal culture in which the organisation is located.

This section is organised in accordance with conceptual views that are common in international management research: culture-specific and culture-free. While culture-specific practices are applicable only in certain cultural contexts, the assumption of culture-universalism has no such limitation. More common in the OM/QM field is the similar theoretical perspective of contingency theory. It relates to the "understanding of the contextual conditions under which [practices] are effective" (R. Sousa & Voss, 2008, p. 697).

Contingency theory stresses the need of organisations to adapt to environmental circumstances and that "the appropriate form depends on the kind of task or environment with which one is dealing" (Morgan, 2006, p. 42). In this perspective of "fit", there is no "one best way of organising", but the organisation with its various subsystems needs to continuously adapt to its environment. In their foundational study, Lawrence and Lorsch's (1967) found that the primary environmental variables were uncertainty of information, rate of change and time span until definitive feedback.

Although the suggestion to include national culture in the contingency model of organisations was already made by Child and Kieser (1979), a contingency perspective did traditionally not include culture as a contingency variable. Until a recent review of the OM literature, in which Sousa and Voss (2008) list "national culture" as one of several contingency factors.

Clark and Mueller (1996), for instance, explained, "the core assumption of the orthodox contingency-organization theory of design is that the ideal blue-print for a specific firm as derived from the theory can be implemented in practice, *independent of the societal context* into which the organization is embedded" (p. 132, emphasis

added). The fact that Sousa and Voss (2008) included national culture can thus be understood as a sign of the increasing acknowledgement of the contingency perspective in OM theory in general, and the significance of societal culture in particular. As pointed out by Sousa and Voss (2008), the initial interest in culture on the field of OM/QM stems probably from the fact that many of the OM management concepts such as CI originated in Japan.

Another term which is sometimes confused with the culture-specific/universal dichotomy is the distinction between cultural convergence and divergence. Followers of the convergence hypothesis argue that cultural differences between societies and management systems will gradually disappear with advancing economical development, while the divergence viewpoint implies that societies maintain or even increase their cultural distinctiveness during the development process. This perspective created significant interest in the debate around the “Japanese management model” (Dunphy, 1987), one aspect of which being the CI approach. Japanese management practices did not only seem to differ in significant ways from what was known as “sound management” in the United States, but it also outperformed Western approaches. No wonder that “some Japanese management practices disturbed Western researchers” (Dunphy, 1987, p. 446).

Although conceptually distinct from culture-free/culture-specific argument – the convergence/divergence distinction refers to the process of cultural change while universalist/specific dichotomy describes properties of management practices – the underlying assumptions are similar. Ashkanasy and Jackson (2002) explained that

The convergence perspective downplays the ‘culture-bound’ or conservative effect of societal culture in favor of what might be termed a more or less ‘culture-free’ view. This view generally has it that, rather than societal culture, the limitations of technology and economic efficiency circumscribe the industrial forms that a society can adopt. (p. 410)

In both the culture-free and the convergence view, a certain set of practices is viewed as superior in an absolute sense: If cultures and management systems converge

toward a more developed state, these practices should, eventually, be universally applicable.

2.3.2.1 Culture as contingency variable – the notion of cultural fit

This first stream of research examines the role of societal culture as an external constraint or a contingency variable to practices of CI.

The much-cited study of Newman and Nollen (1996) examined the fit between management practices and national culture in a multinational organisation using Hofstede's (1980a) framework of national culture. They found that business units whose management practice were congruent with the national culture showed higher financial performance.

This has similarity to what Noronha called "culture-specific TQM". Based on survey data from different Chinese regions he developed a model that showed how Chinese values are reflected in quality related processes, methods, and results. Using confirmatory factor analysis he thus developed a "culture-specific TQM model" reflecting Confucian values in China. He explained that:

Total quality management itself as a transcendent culture has abundant room to work within the unique climate of organization. Whether TQM will sustain or fail relies largely on how it fuses with the quality climate, which is in turn influenced by the national culture setting. In other words, there is no pre-packaged TQM applicable to all organizations worldwide. The implementation of TQM has to be culture specific. Although some cultural values may appear more in line with TQM principles while others may not, it does not mean that an organization can simply use TQM to transform its culture. Rather, TQM and the respective organizational climate must fuse together, absorbing each other mutually. (2002b, p. 142)

Many organisations worldwide regard the Malcolm Baldrige National Quality award as a guideline, since its framework of constructs and weights "specifies cause and effect, implying which practices lead to various desired outcomes" (Flynn & Saladin, 2001, p. 618). Flynn and Saladin (2006) examined the relevance of the Baldrige criteria across different societal cultures on a sample consisting of quality-leading

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manufacturing organisations from the US, Germany, Italy, England and Japan by relating them to Hofstede's (1980a) dimensions of national culture. They found that "national culture plays a strong role in the effectiveness of the Baldrige construct" (p. 583) and concluded that "there is not a universal model for performance excellence and that practices and approaches should be adapted to the local culture" (p. 599).

Based on the same data set as Flynn and Saladin's study (the second data collection round or the World Class Manufacturing project) Rungtusanathan and colleagues (2005) examined whether the Deming-based theory and definitions of TQM are different in different cultures. While they could not find convergence in the use of TQM elements across all of the four examined countries of Japan, Germany, Italy and the US, they also found great similarities between countries so that neither the culture-specific nor the culture-free (universalist) hypothesis is fully supported.

To determine the fit of CI practices with the respective societal culture Robert et al. (2000) examined job satisfaction of employees in branches of a single international firm in India, Poland, Mexico the US using structural equation modelling. They found CI to be significantly associated with job satisfaction irrespective of the societal culture, but the strength of the relationship differed considerably. Like other researchers before them, they highlight the importance of the cultural dimensions of I-C and Power Distance.

In a recent study, Vecchi and Brennan (2009) examined whether QM practices are culture-specific or universal in a cross-cultural study involving data from 23 countries (International Manufacturing Strategy Survey, 4th data collection round). In their study they find strong evidence for the culture-specific view on QM.

As opposed to Vecchi and Brennan (2009), whose results "clearly indicated the significant relationship between cultural dimensions and quality management" (p. 158), Dahlgaard et al., (1998) did not pursue societal culture as an explanatory variable in their analysis. Although they did find significant differences in their sample of organisations in several Eastern and Western countries, they held that "the development of a [organisational] culture of continuous improvements and co-

operation can close much of the gap between the East and the West” (p. 826). This statement is interesting insofar as it exemplifies the implicit convergence or culture-free assumption inherent in much of the OM literature. In its milder form, it is assumed that organisational cultures can be used to compensate for country differences.

Sousa-Poza and colleagues’ (2001) above-mentioned study should not go unnoticed here, as they were the first to include societal culture as a variable in a study investigating organisational culture for TQM effectiveness. Despite the ostensible similarity to Dahlgard and colleagues’ argument, it should be noted that their stance is not congruent with a culture-free position. On the contrary, their results indicated that in distinct socio-cultural contexts, the characteristics of a conducive organisational culture may be different while leading to the same quality performance. In other words, their study abandoned the universalist assumption on both organisational and societal level – and instead pointed toward the importance of the *interplay* between organisational and societal culture. Given that management research is only recently starting to focus on the concurrent importance of organisational and society level factors, their study was undoubtedly ahead of its time.

Summing up, in studies that investigate societal culture for practices of CI, culture is conceptualised as an external constraint whose knowledge should be used to manage organisations more effectively in different cultural contexts. These mostly survey-based studies map statistical co-relationships between the use or perceived effectiveness of CI practices in different cultures and the scores in cultural frameworks (most notably, Hofstede, 1980a; House, et al., 2004) to predict contingent relationships. Clearly, the literature lacks integrative views that look at the simultaneous role of societal and organisational cultures, with the exception of Sousa-Poza’s (1999) study. Unfortunately this attempt has gone largely unheeded.

In the above mentioned literature review, Sousa and Voss (2008) came to the conclusion that – with one exception – “all studies support the existence of contingency effects” (p. 703) in relation to societal culture. Although the present

review has covered a different set of studies than Sousa and Voss' review, a similar picture emerges: The weight of evidence suggests that there are differences in characteristics and performance of CI practice between countries that can be explained by cultural theory, whether studies choose the convergence/divergence, culture-specific/culture-free or a contingency perspective as theoretical lens.

To conclude, a compelling argument is brought forward by Rungtusanathan and colleagues (2005) who suggest that:

Instead of debating whether or not TQM, in its entirety, is applicable across various settings, we should, perhaps, be asking more specifically about which TQM constructs and TQM relationships are applicable/not applicable across which countries, as well as how and why such would be the case. (p. 58, emphasis added)

Accordingly, the following section deals with studies that take a closer look at culture using a case study approach.

2.3.2.2 Single case studies

This class of studies look at the role of societal culture beyond the simplicity of pre-defined cultural frameworks through case research.

Gómez (2004) investigated factors that affected the implementation of CI and learning practices in the case of a Mexican subsidiary of a US multinational corporation. With regard to HR management she found universal, culture-specific and a third class of practices she labelled “translations” of practices into the Mexican cultural context.

Also using a case study approach of a Polish manufacturing firm, Roney (1997) assessed the implementation of TQM in a Polish organisation. She stated “we often fail to see how the implicit cultural assumptions embedded in well known managerial programs may be implemented in a way consistent with the dominant [societal] cultural values” and continued “TQM is embedded with cultural values and assumptions which are consistent with its culture of origin (predominantly Japanese)” (p. 152). Clearly, this viewpoint has parallels with many of the conceptual contributions reviewed above. Accordingly she is rather pessimistic about the

possibility to use TQM as a vehicle for significant cultural change within an organisation: “I do not suggest that management attempt to ‘change’ the culture, but simply, or not so simply, to focus on ways that are within management’s control to mitigate the most negative organizational impediments that are produced by a specific cultural characteristic” (p. 162). Instead, she proposed the mutual adaptation between management approach and the organisation to better suit the host culture and discerned the emergence of a TQM “in Poland’s own image” (p. 166). Although the methods through which Roney has come to this conclusions are very different from Noronha’s (2002b) approach of structural equation modelling, the similarity to Noronha’s *culture-specific TQM* in China is striking.

In addition, the congruence of values with the local cultural context was also of particular importance in the following study. D’Iribarne (2002) describes how a successful implementation of TQM in a Moroccan electronics firm was achieved by merging it with Islamic norms and values, and using persons in authority positions as role models. He explained pointedly that “this reform was acceptable because local employees interpreted it as meaningful with respect to their culture. Everyone gave their support when the leader provided a model that the local community could embrace” (p. 248) and carried on, “symbolism, while not trying to replace the tangible, helps give meaning to the tangible by making it a source of enthusiasm and satisfaction. It makes for strong identification with the company” (d’Iribarne, 2002, p. 252).

In a more recent case study, Metters (2008) investigated the impact of societal culture on TQM implementation in operations in offshore facilities in two Caribbean countries, Barbados and the Dominican Republic. Quite unusual for the field of OM/QM, Metters applied ethnographic techniques in order to explore what made the TQM programme a success in one of the cases in a failure in another. He explained that the “culture clash” caused “operational dilemmas” as well as how and why “un-intuitive operational adaptations” were made to solve the issues. Similar to the above cases, in the facility where TQM was implemented successfully, it was practiced in a

locally adapted form that involved “a complete leveling of the hierarchy, as well as requiring employees to practice TQM in their private life” (p. 740).

Summing up, the case studies reviewed here have provided insights that go beyond the possibilities of survey-based methods. As pointed out by Sousa and Voss (2008) recently: “Whilst survey research is excellent for identifying contingency effects, case research can be a better method for building explanations for the observed effects” (R. Sousa & Voss, 2008, p. 707). It is remarkable that all of the here reviewed case studies, with the exception of the recent study of Metters (2008), were published outside of the established QM/OM journals.

2.3.2.3 Diffusion and cultural adaptation processes: (In)variance of CI?

Up to this point of the review, an approach of CI was viewed as relatively stable entity or a set of different sub-practices. The choice of CI practices and shape of the organisational (quality) culture was implicitly assumed to be at the discretion of management and subject to a rational selection process to achieve best possible performance. In the following, I will look at theoretical perspectives that challenge this assumption.

One of these perspectives, institutional theory, tries to explain performance factors by looking at the “national business system”, the dominant rationalised concepts of organisational functioning that are institutionalised in a society. Thus institutional theory goes beyond a purely cultural perspective, to also include elements such as the educational, socioeconomic, normative or legal factors. Generally speaking, these arguments have challenged the “possibility of treating organizations as analytically distinct from the contexts in which they are embedded” (Clark & Mueller, 1996, pp. 128-129). New institutionalism, also called neoinstitutional theory, goes back to the work of DiMaggio and Powell (1983), and explains the fact that many organisations have very similar structures (isomorphism) through their strive for legitimacy within the institutional environment in which organisations are embedded. In more common terms, new institutionalism postulates that peer pressure between institutions, rather than the quest for organisational effectiveness or other factors is the driving force for

the adoption of certain practices. Notably, institutionalism, along with contingency theory, was identified as a promising theoretical perspective in the OM/QM field in the recent review by Sousa and Voss (2008).

Moreover, in many of the following studies, which are located mostly outside traditional OM/QM outlets, organisational researchers have theorised the process of translation, adaptation or diffusion of CI practices. This theoretical perspective has recently attracted attention in reputable outlets of OS (e.g., Ansari, Fiss, & Zajac, 2010).

In an early contribution, Lillrank (1995) theorised the transfer of organisational innovations using the example of quality circles. According to Lillrank, the adoption of practices should be understood as a learning process in which practices are “abstracted and then recreated in an application that fits local conditions” (p. 988). In this perspective, the failure of quality circles in much of the West “illustrates a case where the complexity of a Japanese organizational innovation was not adequately captured and abstracted” (p. 979). He used the metaphor of electric transmission for the abstraction and application of organisational innovations, where a large cultural and social distance causes losses, i.e. inhibits the transfer or evokes changes in the innovations. Hence the successful transfer of innovations requires an “intelligent learning process, where examples from abroad are used as stimulation for one’s own thinking” (p. 988).

Examining the transfer of CI practice across cultural boundaries, too, Saka (2004) investigated the transfer of Japanese work systems into subsidiaries in the automotive industry located in a different socio-cultural environment, namely the UK. She used a case study approach and applied an institutional theoretical perspective. She examined the “interplay between institutional forces and organizational action” (p. 219) for the adoption of “structural, cultural and control-related” (p. 209) work systems from the parent company. In the “diffusion” process, she finds no unified pattern in accepting alternative work systems, which contrasts with the concept of isomorphism that underlies neoinstitutional theory. In other words, organisations

attempted to translate work practices into the local context rather than submitting to institutional “peer” pressures when accepting them.

Also using an institutional theoretical perspective, Kostova (1999) devised a model about the transnational transfer of strategic organisational practices, such as CI and TQM. Notably, she used a multilevel approach involving the institutional distance between home and recipient of the practice, in terms of regulatory, cognitive and normative elements, the organisational culture and finally the relation between home and recipient organisation. The success of the transfer was regarded as a result of the contextual embeddedness of the practice in the recipient context, which is an outcome of a complex configuration consisting of country, organisation and individual level factors. Notably, she described how “practices may become ‘infused with value’ – that is, they may acquire meaning for organizational members that is symbolic and normative in nature, a meaning that goes beyond technical efficiency” (p. 310). The parallels to CI regarded as “a cultural phenomenon” (Kujala & Lillrank, 2004) are remarkable.

Aoki (2008) used Wenger’s (1998) concept of “Communities of Practice” (COPs) as theoretical lens to study the transfer of Japanese CI practices to overseas operations in China. To some degree similar to the concept of organisational culture, people within COPs learn and develop their identities through participation in these communities that are the social context “that gives structure and meaning to what we do” (Wenger, 1998, p. 47). Using a multiple-case study approach through which he compared successful with unsuccessful cases of CI transfer, he identified several factors associated with successful learning in the Chinese cases, among them team-based rather than individual-based suggestion schemes, human resource practices that support multi-skilling and long-term employment as well as frequent visits of the operations through management.

Notably, many of these approaches abandon the idea of invariant CI concepts – instead, CI concepts are viewed as morphing and adapting into local contexts as they “travel” through space and time. This stands in contrast to earlier attempts in the field

of OM/QM to empirically pin down (notably, Ahire, Golhar, & Waller, 1996; Flynn, Schroeder, & Sakakibara, 1994; Saraph, Benson, & Schroeder, 1989) or mutual demarcate different CI approaches (e.g. Pettersen, 2009a).

While the present study does not employ any of the above theoretical perspective, the work helped inform the conceptual understanding of culture and the overall study design.

2.4 Chapter Summary and Conclusion

The role of culture for CI in organisations has experienced sustained attention in the scholarly literature for decades. Early contributors attributed Japanese management techniques of CI a “basic simplicity and low requirements for staff expertise” (Ebrahimpour & Schonberger, 1984, p. 421) and believed that their straightforwardness made them universally applicable requiring only some training of employees for a successful international transfer, including to developing countries. The research has come a long way since then. A number of recent studies (Aoki, 2008; Baranek, Tan, & Debnar, 2009; Saka, 2004) show that the social embeddedness is still less well understood than it was already assumed more than two decades ago. However, there is little doubt that culture at both the organisational and the societal level plays an important role for the effectiveness of CI.

Two different perspectives dominate the research, around which the present review was organised. The first investigates the organisation itself without regard to its external context and typically tries to determine an organisational cultural profile that is associated with high performance in CI.

On a *conceptual* level, there are several attempts to acknowledge the depth of the concept of organisational culture for CI (e.g. Bright & Cooper, 1993; Detert, et al., 2001; Kujala, 2002; Kujala & Lillrank, 2004) but these attempts had seemingly little impact on the research practice in the field of OM/QM. That is to say that the analysis of *empirical* studies highlighted that research practices is characterised by the use of pre-defined cultural frameworks, most notably the CVF. However, this quest for *the*

organisational culture of CI has led to contradictory results - studies based on samples from different countries have come up with different “ideal” cultural profiles.

In agreement with this, Sousa-Poza’s (1999) cross-cultural comparative study did not find one *single universal* model to link organisational culture with performance. Instead, he found that country- or region-specific models are better suited to explain the effectiveness of QM – a strong indication for the role of societal culture.

The second perspective focuses on societal-level culture and treats the cultural context of organisations as an external constraint or a contingency variable to CI.

The weight of evidence suggests the significance of a culture-specific view on CI. As Sousa and Voss (2008) recently pointed out, the focus in OM has recently started to shift from the mere identification of contingency effects to the “understanding of the contextual conditions under which they are effective” (p. 698).

Similar to studies on organisational culture, both empirical and conceptual studies on societal culture make heavy use of pre-defined frameworks of culture, in particular Hofstede’s (1980a) dimensional framework. The theme of I-C appears to be of particular importance, possibly least due to the non-Western origins of CI concepts.

Just as studies on organisational culture are generally conducted in disregard of societal culture, empirical studies that focus on societal culture typically neglect the impact of organisational culture. This leaves us with two main conclusions, which will be elaborated in the following sections.

2.4.1 Organisational and societal culture – Don’t separate what belongs together

While many conceptual contributions acknowledge the simultaneous role of organisational and societal factors (e.g. Ansari, et al., 2010; Kostova, 1999), most empirical studies do not. This finding is in line with the analysis from Mathew (2007) who found that studies “mostly studied either the implications of organisational culture for total quality management.. or the impact of national culture dimensions,

like power distance or individualism, on TQM... and ignored the influence that organisational culture might have on quality” (pp. 677-678).

In fact, established OM and QM outlets focus on empirical and conceptual contributions regarding organisational culture, while largely disregarding societal-level culture. Only recently has the field of OM acknowledged the role of societal culture so that contributions from within the OM community are sparse and currently many relevant contributions are located outside the field.

As a result, these two streams of research into the role of culture for CI exist largely in isolation from each other. This fragmentation in the body of knowledge can, in part, explain the lack of integrative views between organisational and societal culture.

This lack of multi-level approaches is problematic because evidence from a multitude of studies in cross-cultural management research has shown that organisational and societal cultures are closely linked. While some say that a strong organisational culture can override the effects of societal culture, prominent scholars of cross-cultural research argue that the opposite is the case and that a common organisational culture can even amplify the effects of societal culture (N. J. Adler & Gundersen, 2008). Therefore it is questionable if any of the two levels of culture should be viewed in isolation and whether studies that view only one of the two levels of culture can come to a universally valid and relevant conclusion.

It seems timely to question the implicit assumption of “one best way” or, more precisely, the existence of a universal “quality culture” (as done previously e.g. by Ambroz, 2004) irrespective of the surrounding societal culture, and to see organisational cultures as embedded in their wider socio-cultural context.

While past research has established unequivocally the importance of both organisational and societal culture for CI, it remains unclear how, to what extent and through what processes these two levels of culture affect CI in organisations. In fact, much of the evidence presented here suggests the need to study the *interplay* between

societal- and organisational-level factors, the importance of which is increasingly being recognised in OS (e.g. Ansari, et al., 2010).

Many studies leave us with findings that CI practices may differ across national boundaries, but we can only speculate with regard to the underlying reasons for these differences. This leads to the second part of the conclusions: Our current view on culture.

2.4.2 Culture requires context-sensitive methods to study it adequately

There is broad consensus about the importance of context for the effectiveness of CI in organisations. This is a direct result of the theme that runs through most of the research literature – both conceptual and empirical – which is the idea of *fit* of practices with the cultural context. It seems therefore absurd that most studies typically employ methods such as surveys that inevitably miss out on the rich contextual background in organisations. In turn, many of the more thoughtful contributions are conceptual in nature and lack sound empirical grounding.

The few empirical studies that provide more profound insights, e.g. Gómez' (2004) and d'Iribarne's (2002) works, are restricted to isolated cases and are moreover published well outside the established OM/QM outlets. As a result, we still have a very limited *systematic* understanding of the key features of a culture of CI and about the mechanisms and conditions under which such a culture is effective – let alone in different socio-cultural contexts.

As Bright and Cooper stated as early as 1993, “the concept of organizational culture receives superficial treatment in the TQM literature” (p. 25) – a fact that, regrettably, remains largely unchanged today. The dominance of “remote” methods such as surveys and pre-defined models of culture demonstrate the propagation of reductionist and de-contextualising perspective on culture in OM/QM.

Metters suggested that our lack of understanding might be due to these methods, as “cultural issues do not present themselves to be solved by linear programs” and went on to suggest that “less often seen qualitative methods may be more appropriate”

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(Metters, 2008, p. 730). While I agree with Metters concerning the need to employ more qualitative methods, I hold that the methods we employ are only an expression of the deeply held assumptions that dominate research practice in the field of OM/QM. This final point is crucial and links into the following chapter: Having outlined the current body of knowledge regarding the role of culture for CI, it is now time to scrutinise the assumptions underlying it.

3. Literature Review II – An Analysis of Underlying Assumptions

3.0 Introduction and Overview

The previous chapter explained the current state of knowledge and thus provided the basis for an examination of the underlying theoretical assumptions of much of the research into the role of culture for CI. In other words, while the previous chapter was concerned with the content of the literature, in this chapter I will examine its theoretical foundations. Understanding these underlying assumptions is paramount because it largely entails the methods and also delimits the knowledge claims made by a study.

First I will set out to analyse cultural research that uses the dominant perspective in OM research, functionalism¹ and demonstrate the dominance of functionalistic research in OM/QM. Having scrutinised these theoretical foundations, the reader will be able to appreciate why multi-level approaches are both rare and conceptionally problematic and how societal culture itself impacts research practice. The chapter concludes with a summary of the three key shortcomings of current research practice which will set the scene for the conceptualisation of the culture construct in the following chapter.

3.1 A Characterisation of Functionalist Studies

Only a relatively narrow range of theoretical perspectives exists in the OM/QM field, as recently noted by Metters (2008). In order to be able to appreciate the contributions these studies make, it is necessary to understand the conditions in which the different streams of research operate.

As pointed out in the previous chapter, data originate normally from the judgement of a single informant per organisation, who is asked to provide a cultural profile of his or

¹ Functionalism refers to Burrell and Morgan's (1979) seminal typology on scientific paradigms, which is discussed in more detail in Chapter 4.3.4.

her organisation using a predefined framework of culture. Data is typically gathered through postal or online surveys.

This is consistent with established research practice in OM; Hill, Nicholson and Westbrook (1999) observed that “the great majority of empirical OM work published is based on postal surveys and/or interviewing executives, where research method selection is made for reasons of practical convenience and academic expectation” (p. 139). Only few empirical studies that examined the role of culture for CI have moved beyond pre-defined models of culture.

The influential work of Smircich (1983a) classifies writers that assume organisational culture is an organisational variable subject to management control as “functionalist”. As Schulz (1995) explains, in the functionalist perspective an organisational culture is viewed in terms of its purpose for the organisation, e.g., “control versus flexibility” and “internal maintenance versus external positioning” as in the case of the popular CVF (Cameron, 1978). This is similar to Schein’s (2004)² explanation of “internal integration” and “external adaptation” as *raison d’être* of an organisational culture. As Scott (2003) puts it in his seminal work “Organizations: Rational, natural and open systems”: In a functionalist analysis, an organisational feature “is explained in terms of its consequences - the *function it performs - rather than by reference to its origins*” (p. 60, emphasis added). This distinction is essential for the argument of this thesis.

The functionalist perspective is described in more general detail in Table 3. It is important to note that different authors make reference to different features of the functionalist paradigm and there is generally little clarity around the terms. In the literature examined in the following, the terms “universalist”, “positivist”, “objectivist”, “scientific” “reductionist” or “rationalistic” make usually reference to

² Although Schein’s approach is often considered functionalist (Schulz, 1995), it deviates particularly in its empirical aspects from the often narrow quantitative and *etic* (culture-universalist) approaches which are characteristic of the functionalist approach. Schein’s workshop approach (Schein, 1991) can even be thought to contain a strong interpretive orientation in terms of Burrell and Morgan’s (1979) well-known typology of scientific paradigms (see Section 4.3.4 for more information).

features of the functionalist paradigm. Moreover, the use of quantitative empirical methods is often an indication for a functionalist orientation of a study.

Table 3: Summary of functionalist assumptions (adapted from Guba, 1990, p. 20)

| Feature | Description |
|------------------------------------|--|
| Ontology (nature of “knowable”) | Realist – reality exists “out there” and is driven by immutable laws and mechanisms. Knowledge of these entities, laws, and mechanisms can be summarised in time- and context-free (i.e. universalist) generalisations, such as cause-effect laws. |
| Epistemology (theory of knowledge) | Positivist – it is both possible and essential for the inquirer to adopt a distant, non-interactive posture. Values and other biasing and confounding factors are thereby automatically excluded from influencing the outcomes. |
| Axiology | Features of organisations are looked at in terms of their contribution to the “functioning” of an organisation, which is ordinarily congruent with managerial interests. |
| Methodology (approach of inquiry) | Quantitative/experimental – questions and/or hypotheses are stated in advance in propositional form and are subjected to empirical tests (falsification) under carefully controlled conditions. |

3.2 Dominance of Functionalism in OM/QM Research Practice

The theoretical perspective that dominates OM/QM research has been characterised aptly by Ketoviki and Schroeder (2004):

In typical empirical studies, we often look at the different aspects of organizations such as manufacturing plants by breaking them down in a reductionist manner into their constituent parts, and then analyzing them—through methods akin to comparative structural analysis... to determine how variance in specific structural arrangements and organizational routines (e.g., manufacturing practices) correlates with operational and economic performance. (p. 64)

In a recent comprehensive review, Craighead and Meredith (2008) examined the evolution of the OM literature from the late 1970s to 2003 through a content analysis of articles in five of the most recognised OM journals. As criteria (dimensions) of their analysis they used the researchers’ frameworks and the data sources used in the studies. Although they could discern a trend toward more interpretive analyses in OM research, “rationalistic, axiomatic analyses” still dominate the outlets so that “artificial

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reconstructions of reality and people's perceptions of reality (primarily through surveys) account for 84 percent of OM research efforts published in 2003" (p. 723).

In a similar vein, Pilkington and Meredith (2009) conducted a citation/co-citation analysis of OM studies published between 1980 and 2006 to investigate the methods and theoretical perspectives employed in different subfields of the OM body of knowledge. According to their analysis, the field of QM remains particularly strongly connected to quantitative, statistical methods.

However, they were also able to make out a "positive development for the field in that it shows the increasing interest in conducting more rigorous and also more empirical research, as well as borrowing theories from other areas beyond Industrial Engineering and Operations Research" (p. 194) and "see the field as entering a dynamic period with substantial changes in its research methods that are continuing to evolve" (p. 198).

Summing up, these reviews indicate that functionalism continues to be the dominant perspective in both OM/QM research. In the following sections I will scrutinise the underlying assumptions of the functionalist approach to culture in OM/QM research. The analysis will be greatly helped by an extensive body of knowledge from OS regarding organisational culture.

This is because the topic of organisational culture attracted enormous interest during the 1980s and 1990s in the field of OS which resulted in a considerable amount of conceptual and empirical contributions. Most notably, the cultural perspective on organisations was viewed as an alternative to the tenets of functionalism (Barley, Meyer, & Gash, 1988) and subsequent dissent about adequate research practice ("paradigm wars", see e.g. Martin, 2004; Martin & Frost, 1996) led to considerable debate in the OS literature scrutinizing the underlying assumption of functionalist research, from which the following critical analysis has greatly benefited. These insights were – regrettably – only sporadically used to inform cultural research in OM studies.

3.3 Functionalist Research of Organisational Culture

In the following sections I will discuss the implicit assumptions of functionalist studies of organisational culture.

3.3.1 Observability and awareness

The use of “remote” techniques such as pen & paper or online surveys implicitly assumes that culture can be observed, measured and reported objectively through the solitary efforts of a single organisational respondent, i.e. an “organisational insider”. This is clearly at odds with the writings of Schein (1985, 2010) and other prominent writers on organisational culture (e.g., Rousseau, 1990), who assert that the core elements of culture are tacit and below consciousness and can only be brought to awareness and extracted through extensive interaction with an organisational outsider. According to Schein’s typology of cultural elements the data collected through those “remote” techniques would have to be classified – at best – as merely *espoused values*, but clearly not as *the* organisational culture. This is startling, since the vast majority of studies in OM/QM that examine the role of culture for CI make strong reference to Schein’s influential work.

3.3.2 Neutrality

The respondent’s answers are assumed to be value-neutral and largely identical with anybody else’s view in the organisation, so they can be taken at face value to constitute the organisation’s culture. In reality, most studies are based on answers from a single person per organisation in a management position in the quality or general operations area. Although some studies examine the agreement between dual informants in a number of organisations (e.g., Zu, et al., 2010), practically no attempts are made to obtain evaluations from different hierarchical levels, such as frontline workers versus top management. In other words, the not far-fetched possibility of managerial bias in assessing the organisational culture is hardly given any consideration.

3.3.3 Relevance and completeness

It is important to note that in reality, all predefined frameworks of culture only selectively assess certain cultural features of organisations, while omitting others. In the choice of predefined frameworks for measuring culture writers often highlight the psychometric properties, such as reliability and measures of validity, but fail to critically assess the actual relevance of features probed by the respective framework and, more importantly, the potential relevance of features *not* measured. For instance, the above-mentioned Competing Values Framework (CVF) by Quinn and Rohrbaugh (1981) was originally developed to measure organisational effectiveness and only became popular for cultural analysis in the heyday of the “culture movement” in OS. It measures culture of organisations based on the degree of (de-)centralisation as well as internal versus external orientation. Not least because it is supposedly “a simple way to model the complexity of organisational culture” (Chang & Wiebe, 1996, p. 26) it is the most frequently used framework of culture in quality and OM research. According to Yu (2009) the CVF is not designed to measure the organisational culture “panorama” but only the dimensions related to effectiveness.

Despite – or because of – the highly structured approach to data gathering and analysis it is not clear whether such approaches actually tap the *relevant* aspects of cultures of CI. This is in line with the argument of Hill, Nicholson and Westbrook (1999) who pointed out that the internal validity of remote, quantitative studies in OM is gained at the expense of external validity or relevance.

3.3.4 Homogeneity and integration

Organisations are often implicitly viewed as culturally homogeneous across departments, sites and even national borders. In other words, the organisational culture is viewed as a uniform, monolithic block. Subcultures are ignored or viewed as under “an overriding cultural umbrella” (Sinclair & Collins, 1994, p. 23) and thus largely congruent with the “main” culture of the organisation. Considerations of cultural differentiation or fragmentation within an organisational unit, which have

had important implications in the understanding of organisational culture in OS (Martin, 1992, 2002) are not taken into consideration.

3.3.5 Cultural de-contextualisation

As Sinclair and Collins (1994) put it, the functionalist perspective in OM “seems to forget that workers go home at night and that even someone coming straight from school to the workplace has 16-17 years of life experience” (p. 24). Similarly, Adler and Jelinek (1986) stated “the concept of organizational culture (...) focuses on the inside of the organization and treats the organization as if it were separate from the societal environment in which it is embedded” (p. 86). In other words, the surrounding societal culture is disregarded and it is implicitly assumed that the organisational culture is an entirely separate entity, which will lead to the same outcomes when put into a different socio-cultural context. Maybe therefore it is not too surprising that studies from different countries have come up with different “ideal” profiles of organisation culture for CI, as pointed out in the previous chapter.

3.3.6 Universality

As a by-product of this cultural de-contextualisation, research instruments such as the CVF that were developed in and for a particular societal cultural context are implicitly assumed to be universally applicable and are being deployed uncritically across cultural boundaries. Put more generally, frameworks of organisational culture are implicitly assumed to be universally valid and meaningful in any organisation, any industry, and even in any country.

If one deliberates that the functionalist perspective looks at culture in terms of its outcomes rather than its origins, it also does not come as much of a surprise that this view is accompanied by universalist, de-contextualising perspective: After all, the desired managerial outcomes such as “customer orientation”, “focus on process” or “agility” are virtually identical for organisations all around the globe. Therefore the need to consider organisational context such as the societal culture is not immediately obvious from a functionalist perspective.

3.3.7 Independence

In functionalistic research organisational culture is treated as a stand-alone entity, independent from managerial practices and the organisational context. However, as was shown in the first part of this chapter, culture and CI do not only share much of their history of origins, but there is also a substantial conceptual overlap between the two constructs. It seems therefore questionable at best to artificially separate the two constructs in empirical research. Moreover, this easily leads to what is known as the tautological fallacy in cultural research (e.g., Alvesson, 2002, pp. 57-58): Culture, being conceptualised in terms of its “outcomes” (i.e. in a functionalistic way), is usually operationalised in direct reference to behaviour in many cultural frameworks rather than on an ideational or cognitive level. Thus, despite of contrary claims, many studies effectively do not investigate culture at all, but put side-by-side one behaviour with another. By implication, the results of such studies are methodologically precise but *de facto* largely irrelevant.

3.3.8 Utility

In the functionalist perspective, culture can be manipulated to better suit managerial purposes. Mann (2009) can serve as an extreme example in that he considers the culture to be “interchangeable” with the “management system” of the organisation. Similarly, other authors advise the “modification” of the organisational culture (Yong & Pheng, 2008, p. 245) if it does not match the “ideal” profile. The functionalist perspective thus elevates the position of managers to one of cultural “architects” outside of, rather than as part of and subject to the organisation’s cultural system. In other words, it implicitly assumes that organisations *possess* cultures and not *are* cultures (Smircich, 1983a). This “aggrandizement of the managerial role” (Sinclair & Collins, 1994) is not necessarily beneficial for an adequate understanding of the role of culture in organisations. Sinclair and Collins (1994), for instance, note: “since organizations *are* cultures, it is more difficult for management to see that they are part of the culture and are affected by it” (p. 23, emphasis added).

3.3.9 Culture as a measurable variable

In functionalist studies culture is treated as a variable that can be broken down into universal constituents, easily quantified and measured objectively, as exemplified by Hofstede's dimensions of culture. This logic permits the use of predefined quantitative frameworks to determine statistical co-relationships between predefined variables to map cause-effect relationships.

However, if organisations are best understood to *be* cultures, then trying to determine a "cultural profile" of the organisation that is associated with high performance makes little sense and fails to acknowledge the complex and holistic nature of culture. The perspective results often in mechanical prescriptions to manipulate, alter or engineer the culture of the organisation.

3.3.10 Disregard of language

Many studies that compare practices across cultural boundaries do not even describe whether and how the research instruments have been translated into local languages, let alone depict the measures that were used (were they?) to assure equivalence of meanings of the questions in different languages.

In conclusion, the functionalist perspective views organisational culture as an organisational property that is subject to management control. It is treated as one of many other organisational variables that lend themselves to quantitative evaluation and manipulation through management to better suit functional purposes of the organisation.

I agree with Adler and Jelinek (1986) in that "it is not so much that the... construct of organization culture is wrong or wholly dysfunctional, but that it is incomplete" (p. 87). Yong and Pheng (2008), for instance, in the above mentioned study using the CVF to investigate organisational culture and TQM in Singaporean construction companies, even level some self-criticism with regard to the "lack of depth, the questionable content validity in association with the interpretation and the use of the cultural instrument developed in another cultural environment" (p. 345) of their study.

3.4 Functionalist Research of Societal Culture

As pointed out in the previous chapter, only in recent times researchers in OM have begun to acknowledge the importance of societal culture (Pagell, et al., 2005).

According to some, societal culture is “clearly one of the most important variables in the study of human behaviour in organizations” (Sanchez-Runde, Lee, & Steers, 2009, p. 305). Nonetheless until recently the mentioning of societal culture in OM studies as a relevant construct was very sparse. As noted by Metters (2008), for instance, in a literature review of “international operations strategy” articles, Prasad, Babbar and Motwani (2001) examined contributions from 31 selected journals from 1986 until 1997, and in the entire article, the word “culture” was not mentioned once. Moreover, none of the over ninety reviewed articles “had any derivative of the word ‘culture’ in the title” (Metters, 2008, p. 731). A similar point was made by Tannock (2008), who noted that the influence of societal culture has never been completely integrated in OM and QM theory.

As a result, a large proportion of the publications reviewed for this thesis are located outside the well-established OM/QM outlets. This analysis of underlying assumptions refers to quantitative, survey-based studies as opposed to case-based studies who view culture within its socio-cultural context.

If mentioned at all in OM/QM studies, societal-level culture is conceptualised as an external constraint or a contingency variable to the organisation. Culture at this level is seen as congruent with the nation it is in and is implicitly assumed to be “a coherent and enduring set of values that members of the nation-state carry and invariably act upon” (Boyacigiller, Kleinberg, Phillips, & Sackmann, 2004, p. 140). Research done under this “cross-national comparison” (Boyacigiller, et al., 2004) viewpoint “followed a natural science model from a positivist perspective” (Boyacigiller, et al., 2004, p. 110). In “large-scale quantitative studies [that] became the normative form of research” (Boyacigiller, et al., 2004, p. 110) it typically measures constructs related to CI in a variety of different countries and explains observed differences in terms of societal culture, usually through *post hoc* reference to existing quantitative

frameworks of societal culture such as Hofstede's (1980a, 2001) influential bi-polar dimensional model.

Underlying this culture-CI-fit model is a static viewpoint of societal cultures that neglects the cultural dynamics within organisations. The majority of studies conceptualise culture in terms of the "culture dimensions" approach, which has - not least due to Hofstede's seminal work - become "normal science" for cross-cultural studies.

I agree with Lowe (2001) in that Hofstede's framework "is often employed indiscriminately and inappropriately" (p. 315). Interestingly, Hofstede (2001) himself warns: "Some carry the concepts further than I consider wise. At times my supporters worry me more than my critics" (p. 73) and explains in an article with Peterson:

Locating a country's culture on the five dimensions is like locating its geographic position on a map. The geographic coordinates provide useful, even essential information, but a map only provides limited detail, and more extensive knowledge of a culture calls for broader personal exposure. (Hofstede & Peterson, 2000, p. 404)

They forcefully state: "Research needs to avoid ending with culture dimensions as the basis for forming hypotheses" (p. 415).

Summing up, societal culture in most quantitative studies is conceptualised as a static, external constraint. Knowledge of culture is supposed to be used to manage organisations more effectively in different cultural contexts. These studies map statistical co-relationship between CI practices in different cultures and the scores of these cultures in cultural frameworks (most notably, Hofstede, 1980a; House, et al., 2004) to examine contingent relationships.

3.5 The Great Divide – Societal and Organisational Culture

Despite the apparent similarities between societal and organisational-level culture studies (both heavily employ statistical methods and pre-defined cultural frameworks), it is important to note that there are hardly any attempts to provide integrative views of both the organisational and societal level cultures – whether

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inside or outside the OM/QM arena. This is true despite the fact that the need to link organisational culture to the wider societal culture has been recognised early (Beck & Moore, 1985).

So the realization of the importance to consider the surrounding societal culture for studies of organisational culture is by no means new. Roberts and Boyacigiller noted in 1983, “no investigations simultaneously embedded people into organizations and organizations into their environments” (as reported in N. J. Adler & Jelinek, 1986, p. 85). As Adler and Jelinek (1986) pointed out, “organizations and their members are often seen in splendid isolation from the culture around them” (p. 83).

In fact, it is remarkable that Schein’s influential work on organisational culture (1985) fails to even mention societal or national culture in the analysis of the two main cases – a fact that did not go unnoticed to Hofstede and he notes somewhat resentfully: “Nowhere in the book are any conclusions drawn from the fact that the first company is an American-based computer firm, and the second a Swiss-based pharmaceuticals firm. This information is not even mentioned” (Hofstede, 1993, p. 92). Likewise, cross-cultural psychologists Erez and Earley (1993) noted that scholars of organisational culture seem “ignorant of the general culture in which the organisation is embedded” (p. 69).

Therefore both Hofstede and colleagues (1990) and Erez and Earley (1993) came to the conclusion that organisational cultures should be classified as mere “norms” whereas – according to them - national cultures are truly based on “values”. More specifically, Erez and Earley (1993) asserted that “the study of organizational culture is misguided in the sense that organisations do not possess cultures of their own; rather, they are formed as a function of societal culture” (p. 69). Similarly, Hofstede (2002) claimed that “what holds a successful multinational together are shared practices, not, as the ‘corporate culture’ hype of the early 1980s wanted it, shared values” (p. 1360). Hofstede (2006) concluded accordingly that “national cultures and organizational cultures are phenomena of different orders” (p. 885).

Likewise, cross cultural management theorists Trompenaars and Hampden-Turner's (1998) fail to clearly conceptualise the concept of organisational culture in their popular book of national culture for management. This conceptual fragmentation exists despite the fact that there can be no doubt that societal-level culture strongly impacts organisational-culture (e.g., N. J. Adler & Gundersen, 2008; Steers, Nardon, & Sanchez-Runde, 2009; Trompenaars & Hampden-Turner, 1998).

The result is a lack of a conceptual "interface" between organisational and societal culture (Brannen & Kleinberg, 2000). This is particularly true for the field of CI related studies. An analysis of the literature and its underlying assumptions can offer several alternative explanations, which will be explored in some more detail in the following section.

3.6 Cultures of Culture Research³

As explained above, societal cultures were disregarded in the field of OM/QM for a long time. Thus, disciplinary boundaries could simply have prevented integrative views between organisational and societal cultures. It is, however, important to question the reasons for this omission.

Notably, attributing a role to the societal culture or other contextual factors (i.e. a contingency perspective) for the effectiveness of OM/QM management concepts clashes with universalist knowledge claims underlying the functionalist perspective (R. Sousa & Voss, 2008).

Metters (2008) found that "a prevalent attitude in the west in general, and the USA in particular, could be summarized as 'why should culture matter?'" (p. 730). In this connection, Gummersson (2000) observed that management research in North America is dominated by quantitative methods. Adler and Jelinek (1986) noted early that:

³ Title in reference to Barley, Meyer and Gash's (1988) seminal article.

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Listening to our American colleagues struggle with, and often reject, the concept of national cultural differences has made us suspicious that seeing, managing, and using cultural differences is an illegitimate process when viewed from within the American cultural paradigm. In contrast, creating, managing, maintaining, and changing organizational cultures seems somehow more acceptable. (pp. 73-74, emphasis added).

They consequently offered a rather compelling explanation: They identified the dominant US-American cultural orientation reflected in much of the literature to view change as “both possible and good” (p. 84), and go on to suggest that the refusal to take the role of the wider societal culture for organisational cultures into consideration is a consequence of this orientation: “Perhaps we also find it necessary to limit our ability to see, let alone to study, the impact of societal culture – because it seems far more difficult to change” (p. 85).

More dramatically, Lowe (2001) asserts that:

The scientific sub-culture of functionalism is hegemonic within western social scientific paradigms. The paradigm hermeticism and paradigm 'wars' characterizing this contested domain prevent integrative and synthetic views... resulting in avoidance of an agenda to understand the complexities of culture beyond a western mechanistic, quantitative parochialism. (p. 313)

Adler and Jelinek (1986) even argued that the (functionalist) concept of organisational culture, as approached in the 1980, is bound to the American culture in particular and perhaps to the Western culture in general. Kanji and Yui (1997), for instance, reported that the Japanese do not commonly use the concept of organisational culture.

In this respect, an interesting argument is brought forward by cross-cultural psychologist Nisbett. Research in cross-cultural psychology suggests that research practice and culturally defined cognitive styles could be intimately intertwined. Nisbett (2003) explains that:

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To the Asians, the world is a complex place, composed by continuous substances, understandable in terms of the whole rather than in terms of the parts, and subject more to collective than to personal control. To the Westerner, the world is a relatively simple place, composed of discrete objects that can be understood without undue attention to context, and highly subject to personal control. (p. 100)

More specifically, he adds “Americans are prone to attend only to salient objects and to ignore contexts” (p. 207). This is remarkably congruent with the dominant (Western) research paradigm of functionalism.

Summing up, as opposed to organisational culture, a societal culture can obviously not be manipulated by management to better suit organisational needs. Therefore it ostensibly reduces – rather than increases – managerial influence and control. This is naturally at odds with the underlying managerial interest of functionalism and can help explain the limited attention paid to societal culture in the past in OM/QM studies. Interestingly, research practice itself appears to be subject to cultural influences. In this sense, culture works on two levels: culture affects our research practice, which in turn impacts our propensity to acknowledge its importance.

3.7 Chapter Summary and Conclusions

3.7.1 Dominance of functionalism

As the point of departure, this chapter scrutinised the underlying assumptions of existing research. Examples of several studies were provided to illustrate how the distinct streams of research differ in their perspective on culture. Across these streams, the functionalist perspective is dominant in Western science in general and in OM/QM research in particular. However, in most studies the assumptions of functionalist research practice remain for the most part tacit.

Although it is widely acknowledged that culture plays an essential role for CI in organisations, the field of OM has failed to conduct a critical self-analysis in terms of its research practice and cleaves to a “natural science view” of the world. This has

resulted in a relative paucity of theoretical perspectives and an uninformed approach to epistemology (provided that the term is known).

A visible result of the limitations of functionalist research practice in OM is that the richest contributions regarding the role of culture for CI are largely either conceptual in nature or published outside the OM/QM arena, which links back to the first part of this review (see Chapter Literature Review I – Current Body of Knowledge).

3.7.2 Key shortcomings

Integrating the insights from the previous Chapter 2, the most striking shortcomings of current research practice can be summarised as follows.

3.7.2.1 Exclusive attention to organisational function

Although most studies – both conceptual and empirical – attempt to define a culture of CI, they actually provide the reader only with the managerial prescriptions what *function* the culture is supposed to perform, mostly in the form of a predefined framework of culture. They give, if any, only sparse information about how or why organisational members should accept and internalise the managerially prescribed values or meanings.

3.7.2.2 Inadequate de-contextualisation

In terms of the research practice in OM, quantitative “remote” approaches clearly prevail over qualitative and interpretive approaches. It is characterised by the heavy use of surveys or questioning of “key informants” such as alleged experts or managers. Survey-based studies “frequently miss out on the contextual richness” (R. Sousa & Voss, 2008, p. 697). In fact, in studies that investigate culture the adequacy of these methods is questionable at best, because they cannot cater to the needs of understanding the complex reciprocal relationships between culture, CI and the organisational context.

Worrall and Jones (2004) described this problem rather pointedly: "While reductionism has its place, there is a real problem that the process of reduction

reduces the richness of the subject being researched as 'nuanced' discursive categories are reduced into rather bland items in a questionnaire" (p. 168).

3.7.2.3 Disjointed perspectives on societal and organisational cultures

The result of the de-contextualisation is a strongly reductionist and fragmented view on culture. Scholars of societal culture tend to downplay the significance of organisational culture, while researchers into organisational culture conceptually marginalise the surrounding societal culture. As a consequence, the majority of studies view organisational cultures in isolation from the socio-cultural context or examine societal cultures while disregarding organisational cultures. This led to conceptually disjointed perspectives on culture and a paucity of empirical research in OM/QM that addresses multi-level issues of culture.

3.7.3 Developing new perspectives within OM

The degree of conformity within a scientific field determines the types of questions scholars are prepared to ask, and are indeed capable of asking, given their set of methodological tools. Although scholars seem to be increasingly aware and critical about the "reductionistic approach that is dominant in OM empirical research" (R. Sousa & Voss, 2008, p. 707), a more pluralist view on research practice is required to pose more relevant questions in cultural research in OM.

However, it is very difficult to integrate new perspectives into functionalist research due its self-contained, deductive nature of hypothesis-formulation and testing. As Worrall and Jones (2004) put it: In the "hypothetico-deductive approach, theory is held to exist prior to the study with the objective of the research" (p. 167). As a result, scholars in the field of OM/QM currently make little use of the interpretive or inductive cultural approaches.

Worrall and Jones (2004) argue further that "given that prior theory tells the researcher what data to collect, how to collect it, how to analyse it, how to present the analysis and what hypotheses to test, it is not surprising that much of the [functionalist] research is confirmatory" (p. 168). I agree with them in that

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Approaches geared to the articulation of better questions might be more useful to managers in the long run than approaches that are oriented to the production of the clear but often flawed guidance that managers and the operational users of research often seek. (p. 168)

In order to work toward more relevant perspectives on culture it is therefore not sufficient to add another study on the role of culture for CI; rather, it is necessary to scrutinise and consciously define the theoretical foundations on which to base such a study. The above analysis of the underlying assumptions of current research can help inform a sound conceptualisation of the culture construct, to which I move on in the next chapter.

4. Conceptualisation of Culture

Any definition of culture is also a theory of culture.

(Dredge 1985, cited in Boyacigiller, et al., 2004, p. 143)

4.0 Introduction and Overview

The preceding literature review analysed the issues surrounding current research practice in the study of culture in the field of OM/QM and has provided the reader with the means to frame the challenge of conceptualising the culture construct. This chapter works to define “what culture is, how it comes into being, what it does, why it is important [and] how we can discover it” (Boyacigiller, et al., 2004, p. 139). The perspective used in present study deviates from the dominant theoretical perspective of functionalism. The following discussion of the ontological and epistemological basis of this work locates it in relation to functionalist approaches and is therefore central to understand the contribution this study attempts to make.

It is important to note that the conceptual definition of culture is intimately linked with the ontological and epistemological assumptions, which in turn link directly into the axiology and methodology/research design of the study. Table 4 shows the “big picture” of this chapter.

Table 4: Roadmap to this chapter

| | General meaning | Question for this study |
|---------------------------------|---|---|
| Definition ↓ | Definition of construct | What is culture? |
| Ontology ↓ | Nature of reality, nature the “knowable” | Where is culture located? |
| Epistemology ↓ | Theory of knowledge, nature of relationship between inquirer and the “knowable” | How can we learn about and know it? |
| Axiology ↓ | Theory of values | How will values impact our knowledge? |
| Methodology/ Research design | Process of attaining knowledge | Through which means should we approach to probe it? |

4.1 Definition

4.1.1 Existing definitions

In many studies of OM/QM, culture is “seen as the ubiquitous reason for the failings of quality efforts, behaviour change, customer focus, employee attitudes and, reward systems and so on” (Mallak, Bringelson, & Lyth, 1997, p. 330). This is not least due to the frequent conceptual vagueness of culture definitions.

The first step toward a better understanding of the role of culture for CI in organisations is therefore a clear conceptualisation of the culture construct. While it is not the purpose of this discussion to fully elucidate the constructs of organisational and societal culture, it is essential to add some clarity. Many of the conceptual works cited in the following go back to the 1980s, when scholars in OS contributed a great deal to the elucidation of the culture construct (Barley, et al., 1988), “while later research was more concerned with a more utilitarian approach” (D. Lewis, 2002, p. 280). Arguably, these early works “have gone furthest toward offering clear definitions of culture, a way of representing culture as a social construct, and a basis for examining the implications of culture for organization” (Boyacigiller, et al., 2004, p. 118).

Not least due to its complexity, the notion of culture lacks a commonly accepted definition not only across disciplinary boundaries, but also within different scientific disciplines. Culture can be defined in many different ways, emphasizing different aspects. As a result, definitions of culture in the literature vary widely; some examples include:

- A “shared knowledge structure that results in decreased variability in individual response to stimuli” (Erez & Earley, 1993).
- “Shared social cognitions within a unit” (Rousseau, 1990, p. 173).
- “Culture is to society what memory is to the person. It specifies designs for living that have proven effective in the past, ways of dealing with social institutions, and ways to think about the self and social behavior that have

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been reinforced in the past. It includes systems of symbols that facilitate interaction” (Triandis, 1989, p. 511).

- “Culture is the system of such publicly and collectively accepted meanings operating for a given group at a given time. This system of terms, forms, categories, and images interprets a people's own situation to themselves” (Pettigrew, 1979, p. 574)
- A “shared system of meanings” (Trompenaars & Hampden-Turner, 1998).
- “Sense making framework for the interpretation of organizational events” (Mackenzie Davey & Symon, 2001, p. 126)
- “Culture consists of patterns, explicit and implicit of and for behaviour acquired and transmitted by symbols, constituting the distinctive achievement of human groups, including their embodiment in artefacts; the essential core of culture consists of traditional (i.e. historically derived and selected) ideas and especially their attached values; culture systems may, on the one hand, be considered as products of action, on the other, as conditioning elements of future action” (Kroeber and Kluckhohn 1952, as cited in Fink & Mayrhofer, 2001, p. 474).
- The “software of the mind” (Hofstede, 2005).
- A “system of shared values defining what is important, and norms, defining appropriate attitudes and behaviors, that guide members' attitudes and behaviors” (O'Reilly & Chatman, 1996, quoted by Detert, et al., 2000).
- The “shared meanings, sensemaking, assumptions, understandings, or knowledge by which a group of people give order to their social world. Such cultural knowledge, be it explicit or tacit, influences both the ways people behave and the ways they interpret events, people, an objects in their social environment... Culture refers to the ideational dimensions of human experience” (Brannen & Kleinberg, 2000, p. 393).

While the cultural elements examined by different studies may vary widely, most definitions of culture have in common the reference to the ideational, often cognitive sphere of human experience that is – to some extent – shared amongst the members

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of the respective group. The level of consensus, however, can vary (Martin, 1992). Only a small number of conceptual definitions include direct reference to behaviours, e.g. “the way we do things around here” (Deal & Kennedy, 1982).

While some definitions refer to abstract individual cognitive categories such as “shared knowledge structure” or “software of the mind,” others refer to collective normative elements such as “collectively accepted norms”. Normative, cognitive and behavioural aspects, however, should probably be viewed as inseparable terms. As social psychologist Nisbett (2003) argues:

My claim is not that the cognitive differences we find in the laboratory cause the differences in attitudes, values, and behaviors, but that the cognitive differences are inseparable from the social and motivational ones. People hold the beliefs they do because of the way they think and they think the way they do because of the nature of the societies they live in. (p. 201)

Put another way, it is not essential whether conceptualisations refer to cognitive, value, social or motivational aspects because they are all strongly interrelated. Therefore I do not conceptually distinguish between meanings, understandings or assumptions for conceptualising organisational culture. It is important, however, which reference for group belonging is used. In this regard many existing definitions offer little clarity, as the following section shows.

4.1.2 Conceptual differences between organisational and societal culture

The need for conceptual clarity emerges most clearly when dealing with multiple levels of culture. Proponents of both levels of culture – organisational and societal – claim that “their own” level of culture is a major determinant of behaviour, without specifying the degree to which this is the case. This leads to paradox and it seems clear that first of all a conceptual definition is required that ties together both levels of culture – societal and organisational.

Prominent scholars of culture assert that societal culture is rooted in values and is unconsciously learned mainly during childhood through enduring attachments and

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commitment to significant others such as family and friends as well as their general social environment (Hofstede, 1985). Hofstede, et al. (1990), for instance, found that country-specific value differences persisted although the participants pertained in the same international organisation. They concluded that the societal socialisation process dominated over the organisational enculturation process. Thus cultural values of individuals that characterise societal culture are permanently internalised during an early stage of life (Hofstede, 1980a). In another study, the non-Anglo-celtic cultural provenance of the respondents from an Australian bank was statistically detectable in the pattern of survey responses (Bochner & Hesketh, 1994), although all respondents lived in Australia.

Organisational cultures, on the other hand, are said to be rooted in practices and learned only during the organisational socialisation process (Hofstede & Fink, 2007). An organisational culture is assumed to originate from organisational leadership (Schein, 1985), value-laden practices or routines (Brah, Tee, & Rao, 2002; Kujala & Lillrank, 2004) or a corporate philosophy (Liker & Hoseus, 2008). Smircich and Calás (1987) add that organisational culture "is the process through which social action and interaction become constructed and reconstructed into an organizational reality. The symbolic constitutes what is taken for granted as organizational life. Culture and communication are vehicles through which reality is constituted in organizational contexts" (p. 234).

In this sense, societal culture is primarily carried by individuals and a deep, largely stable value pattern, while organisational culture is *emerging* and context-bound. This is in line with findings from studies that found that, despite a common organisational culture, societal differences persist (N. J. Adler & Gundersen, 2008; Hofstede, 1980a, 2001; Hofstede, et al., 1990; Laurent, 1983).

Thus societal culture is a deep pattern that often explains only a limited proportion of variance with regard to individual outcomes (Leung, Bhagat, Buchan, Erez, & Gibson, 2005) and often requires large sample sizes to emerge to a statistically significant level in survey research. Organisational culture, in contrast, emerges locally in a given

social context through social interaction or “cultural negotiation” (Brannen & Salk, 2000) and “refers to the ideational level of ideas, understandings, meanings, and symbolism” (Alvesson, 2002, p. 148).

Thus it seems clear that while societal culture may best be understood as deeply internalised and largely stable values or the “software of the mind” (Hofstede, 2005), organisational culture is a more context-bound social construct and essentially refers to common meanings (Alvesson, 2002) or shared understandings (Boyacigiller, et al., 2004).

4.1.3 Existing multi-level concepts and conceptual challenges

The previous Chapter 3 explained why multi-level approaches to culture are conceptually difficult and rare. Using several existing approaches as examples, I will point to conceptual challenges and consequently outline a theoretical perspective that, I believe, is well suited for the purposes of this study.

There remains much controversy around the link between cultural levels. While scholars of societal level often implicitly assume the organisational culture to be a function of the societal culture, theorists of organisational culture tend to marginalise or completely ignore the surrounding societal culture. The importance of multi-level considerations, however, is clear (Kull & Narasimhan, 2010).

While the importance of both societal- and organisational-level cultures is generally recognised, there is little clarity in the link between the two levels. Hofstede (1985), for instance, notes rather vaguely that the “dimensions of national culture, which distinguish national value systems, do affect both individuals and organisations and therefore the integration between them” (p. 351).

Fischer et al. (2005) deplored the lack of integration of organisational and socio-cultural variables in management research. Similarly, Sousa-Poza (1999) fittingly pointed out, “most studies of organizational culture, be they of corporate or ethnological dimensions, make no distinction between the two levels” (p. 171), and

continues to point out that his study of TQM in three different societal cultures “clearly shows that there is a difference between the levels” (p. 171, emphasis added).

Current research practice does not add much conceptual clarity: A recent study of Jung et al. (2008), for instance, adopts the dimensions that were used by Hofstede (1980b) to quantify *national* culture for measuring *organisational* culture. Despite recent efforts toward conceptual clarification of multi-level culture (most notably Erez & Gati, 2004; Fischer, et al., 2005; Sackmann & Phillips, 2004), there are few multi-level frameworks. Only a limited amount of attempts was made, admittedly mostly outside the OM/QM arena – to define multi-level-frameworks involving both organisational and societal culture.

- Project GLOBE (House, et al., 2004) assumes isomorphism of culture on societal and organisational level; in other words that an organisational culture and national culture are “structurally” identical. Accordingly, they use the same set of cultural dimensions to operationalise organisational and societal cultures. While the framework and its cultural scores are highly useful to understand and juxtapose espoused values in societies and organisations, it offers no explanations to link the two levels of culture beyond statistical correlations.
- Sackmann and Phillips (2004) described a class of recent studies and define thereby what they call the “multiple cultures perspective”. In this perspective, “culture is seen not just as carried [by individuals] but as the shared understandings through which culture is actively created (i.e., negotiated) by means of social interaction” (p. 140). Although the “multiple cultures perspective” greatly contributes to an understanding of culture beyond disciplinary and paradigmatic demarcation lines, it does not present a concrete model that aims to enhance the conceptual understanding of multiple cultures simultaneously.
- In this exact vain, Erez and Gati (2004) presented a conceptual model that attempted to explain the inter-level dynamics between individual, group,

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organisational, national and global culture by top-down and bottom-up processes between the respective levels. This conceptual model presents the different levels of culture as nested within one another, with the global culture at the outmost level and the self at the individual level reflecting the cultural values of the individual. This model provides conceptual clarity and attaches value to the multi-layered and dynamic nature of the cultural construct, but despite its systematic structure - or perhaps because of just this rigidity - it adds little understanding as to how inter-level processes occur, let alone with regard to value-laden work practices.

- Fischer et al. (2005), scholars from the field of cross-cultural psychology, recently suggested a model in which organisational level culture takes a mediating role between the societal culture and work behaviour. This viewpoint, however, is similar to the marginalisation of organisational culture as described above. Particularly, this model leaves no conceptual room to understand practices of CI as inherently value-laden as many scholars have argued in the past (e.g. Hellsten & Klefsjö, 2000; Klefsjö, et al., 2008) and is therefore less suitable for the purposes of this study.

Summing up, multi-level models of culture that incorporate societal and organisational-level cultures remain as “substantial challenge” (Fischer, et al., 2005, p. 30). The analysis of the conceptual challenges of multilevel model of culture has provided the understanding of an alternative approach, which leads over to the following section.

4.1.4 A way forward: Erez and Earley’s cultural self-representation theory

To understand the simultaneous role of the macro (societal) cultural environment and the meso-level of organisational culture, recent studies have emphasised the role of the self as the (micro) link between the different levels. For instance, Sanchez-Runde et al. (2009) stated:

The available research literature on culture and personal values consistently demonstrates a strong and significant relationship with work behaviour... This

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appears to be true regardless of whether western or non-western templates are used for either conceptualization or empirical research. As a result, it seems highly advisable to include the role of cultural differences in any future modeling efforts, as well as managerial actions, that involve one's self-concept, individual beliefs and values and individual traits and aspiration levels. These individual factors, in turn, have been shown to be closely related to self-efficacy, work norms and values. (p. 308)

This is in line with the recent call of Leung and Ang (2009) for cross-cultural management research to broaden its current narrow conceptual focus and embrace broader conceptualizations of culture from other disciplines such as cultural anthropology or cross-cultural psychology.

Erez and Earley's (1993) cultural self-representation theory suggests that individuals experience work practices as meaningful when their interpretation of which is aligned to their internalised (societal) cultural values. This theoretical perspective asserts that organisational members use the internalised cultural values to evaluate the meaning of organisational practices. Erez (2009) wrote, "people in different cultures internalize the prevalent cultural values of their society. Therefore, they differ in the meaning they ascribe to a particular management approach" (p. 621).

The values transmitted and endorsed by a societal culture impact the nature and configuration of an individual's self-motives. More precisely, "the self and the self-motives are shaped by the cultural values and they set the standards and criteria for self-evaluation. These criteria vary across cultures and, consequently, they shape different selves" (Erez, 2000, p. 6). The logical connection that leads to the ascription of meanings is shown in Figure 6.



Figure 6: Constructs underlying Erez and Earley's (1993) cultural self-representation theory

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Erez and Earley distinguish between three different classes of self-motives: consistency, enhancement and efficacy (see Table 5). Each of these self-motives is moderated by the internalised societal cultural values. For instance, an individual with a high collectivistic orientation would experience self-consistency mostly through integration in her ingroup.

Table 5: Self-motives (Modified from Erez, 2000)

| | |
|-------------------------|---|
| Self-enhancement | <ul style="list-style-type: none">• “The experience of a positive cognitive and affective state of self-worth and well-being” (Erez, 2009, p. 621)• Maintaining a positive self-image |
| Self-efficacy | <ul style="list-style-type: none">• Feeling of “growth” as a person or in terms personal abilities.• Desire to perceive oneself as competent and efficacious• “Conviction that one is competent and efficacious in relation to specific tasks” (Erez, 2009, p. 621) |
| Self-consistency | <ul style="list-style-type: none">• “Desire to experience to sense coherence and continuity” (Erez, 2009, p. 621) |

Practices that are experienced as contributing to the fulfilment of these self-motives are perceived as meaningful to the individual. When similar meanings are shared within a group of people that give rise to expectations and become the criteria by which behaviour is interpreted, they become a shared meaning system – the group’s culture. Thus, using a cognitive approach on the individual level, this theory can be used to draw the link between the societal and organisational level of culture.

In this sense, societal culture is chiefly carried by individuals. It comes only indirectly into play in the ascription of meanings and social interaction. An organisational culture can thus be understood as the dynamics that result from shared cognitive processes by individuals in terms of the organisational context. The individual constitutes the link between the macro level of societal culture and the meso-level of group or organisational culture.

For the purposes of the present study, Erez and Earley’s (1993) theory of cultural self-representation has several distinct advantages:

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- As the review of the literature showed, the central theme of “local re-interpretation” of organisational practices of CI runs through the literature, be it as Roney’s (1997) case study of “TQM in Poland’s own image”, Noronha’s (Noronha, 2002a) quantitative study of “culture-specific TQM in China”, Kostova’s (1999) contextual embedding or Saka’s (2004) “translation” of CI practices in the local institutional context. Erez and Earley’s framework provides the means to examine how individual ascription of meaning differs in distinct socio-cultural contexts.
- Similarly, practices of CI have often been described as value-laden (e.g., Hellsten & Klefsjö, 2000; Kujala & Lillrank, 2004) or “infused with value” (Kostova, 1999). This theoretical viewpoint is able to provide explanations (e.g. Erez, 2009).
- It has the potential to reconcile many of the past findings: While survey-based studies of societal culture find significant cultural differences in CI work behaviour, they remain elusive as to the role of the organisational culture and the underlying mechanisms.

This discussion has set the stage for the development of a conceptual framework, which will follow in the next section.

4.1.5 Conceptual framework

This following conceptualisation of culture will be used throughout the remainder of this thesis. It is the result of the above theoretical considerations regarding the nature of organisational and societal cultures.

It is based on the simple assumption that group members do not leave their personal values at the doorstep when they go to work. It attempts to conceptualise how organisations that exist within a larger society can develop a distinct cultural system that guides action within the organisation.

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The construct of culture combines psychological (cognitive), social and historical aspects that originate from both internalised individual values as well as social interaction within the group.

Societal culture enters the conceptualisation of the organisational culture through *internalised individual values* of the work group members (far left hand side in Figure 7) as well as indirectly through the role of organisational institutions (bottom of Figure 7) that are affected by societal culture, too.

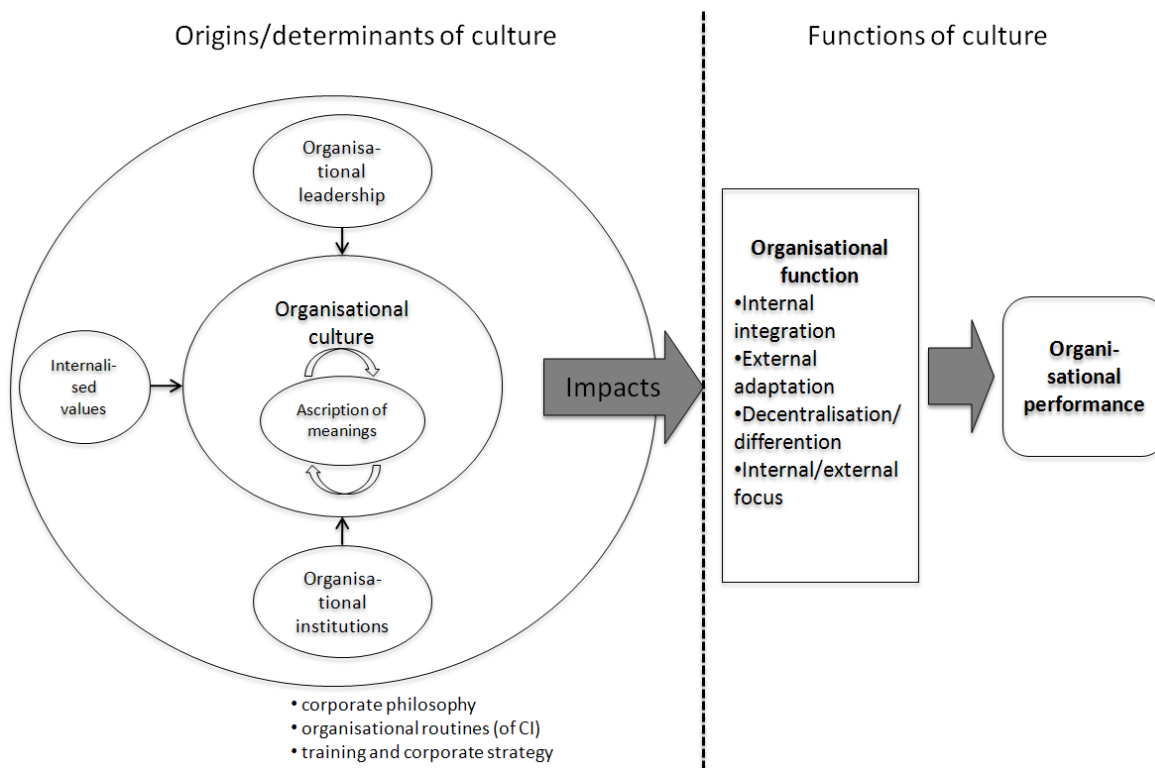


Figure 7: Conceptualisation of organisational culture

The organisational culture can be understood as the result of an ongoing process of individual *ascription of meaning*. Louis (1983) wrote that "meanings result from interpretation" (p. 41). In this sense, ascription of meaning is understood here as the process of (selective) perception and subsequent interpretation of a situation, object, practice or concept. Boyacigiller et al. (2004) explained further that "one of the most important things culture does is to enable people mentally to order their social world... [and to] guide thinking and generate actions" (p. 141).

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As illustrated in Figure 7, internalised individual values (that indirectly reflect the societal culture) play an important role for subjective meaning-making. For instance, the concept of “teamwork” can mean something very different for collectivistic people than for people with a strongly individualistic value-orientation: For a strongly individualistic person, teamwork may mean merely a purposeful assembly to gather the technical expertise to solve a specific problem, while for a collectivistic individual who defines him or herself in terms of the relationships she or he maintains to their reference groups, teamwork may have a strong social dimension with implications for motivation, sharing of information and group coherence (Jackson, Colquitt, Wesson, & Zapata-Phelan, 2006). Likewise, Morgan (2006) gives an interesting example of how Western meanings may differ from Japanese meanings, “from the Western standpoint, Japanese hierarchy may be seen as a pattern of domination. Internally, it may be experienced as a process of mutual service” (p. 146).

The notion of *meanings* is used to conceptualise the culture construct across diverse scientific disciplines and paradigms (in OS, e.g. (Alvesson & Sweningsson, 2008; Schulz, 1995), but also cross-cultural psychology (Fischer, 2009) and management research (Trompenaars & Hampden-Turner, 1998)). Meanings are understood in this study to represent cognitive, social, normative or motivational aspects and thus unify notions such as assumptions, understandings or norms. Alvesson explained in this connection that “the key term 'meaning' refers to how an object or an utterance is interpreted. Meaning has a subjective referent in the sense that it appeals to an expectation, a way of relating to things. Meaning makes an object relevant” (2004, p. 318).

Through social interaction between group members meanings can become *shared* within a given group. These shared meanings resemble conceptually Schein’s (1985) “basic assumptions”. Smircich (1983b) explained that “these shared understandings allow day to day activities to become routinized and taken for granted. Through the development of shared meanings for events, objects, words and people, organization members achieve a sense of communality of experience that facilitates their coordinated action” (p. 55). In turn, existing meanings and “common understandings

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around which action is organised” (Becker & Geer, 1970, p. 134, as cited in Louis, 1983) serve as cognitive frame of reference that guides the *ascription of new meaning* to arising situations or practices. These shared meanings¹ “give form and coherence to the experience of organization members” (Smircich, 1983b, p. 55).

Thus meanings are reciprocally linked to a system which constitutes the organisational culture. These elements of the organisational culture may be in part held consciously, but for the most part are tacit and below awareness. Alongside with individual internalised personalised values, organisational leadership (as described by Schein, 1985) and organisational institutions such as a corporate philosophy (e.g. Liker & Hoseus, 2008) or routines² (e.g. value-laden CI practices, such as in Kujala & Lillrank, 2004) have been identified in past research as major antecedents of an organisational culture of CI and therefore enter this conceptualisation.

These different antecedents of organisational culture are tightly interconnected, as indicated by double arrows in Figure 7. For instance, the *leadership* style, in part, results from the leader’s own *internalised values*. Organisational *institutions*, such as the *corporate philosophy*, foster or impede certain *leadership* styles. In turn, *leaders* may have strong influence on *organisational routines*. Organisational *institutions*, such as the *corporate philosophy*, might impact the overall group’s *internalised value* structure through selective hiring and voluntary job changes based on a lack of person-organisation fit. A good example of person-organisation fit in terms of the organisational philosophy of CI prescribed by the organisation is given by Earley and Erez (1997, p. 7), who describe how Motorola relies on a large labour pool in China in order to achieve sufficient “good fits” for the organisation.

¹ Another related theoretical perspective, organisational symbolism, is concerned with the study of symbolic processes such as organisational rituals, vocabulary or slogans and how they contribute to shared meanings.

² An organisational routine can be understood as a “relatively complex pattern of behaviour...triggered by a relatively small number of initiating signals or choices and functioning as a recognisable unit in a relatively automatic fashion” (Winter, 1986, as cited in Bessant, et al., 2001, p. 68).

It is important to point out that this study conceptually differentiates between the corporate philosophy and the actual organisational culture. While the corporate philosophy may be prescribed in very similar ways in different sub-units of the firm, the actual organisational culture is a result of various concurrent factors (with only one of which being the corporate philosophy) and might differ from one local context to another.

Note how the left-hand side of Figure 7 refers to the origins of culture, while the right-hand side refers to the functions of culture within an organisation. In line with the research aim, the current study is only concerned with the left-hand side of the figure.

This conceptualisation of culture of the present study draws on a variety of existing definitions³ and can be summarised as follows:

The core of a group's culture is composed of mainly subconscious and shared meanings that help people make sense of their experience in the organisation. Meanings are reciprocally linked to a shared meaning system and reinforced through social interaction within the group that may include leadership as well as organisational institutions. Individual meaning-making results from social processes and deeply internalised individual values which are the product of the societal socialisation process. The shared meaning system guides group members in the ascription of new meanings, i.e. perceiving and interpreting situations, objects, practices or concepts. It may become manifest as espoused values, beliefs, or feelings and is implied in expectations, conventions, morals or norms and thus define acceptable behaviour within the group.

Summing up, based on existing conceptualisations and definitions of culture I have provided a conceptual definition that will inform this study⁴. Shared meanings are at

³ notably Sackmann and Phillips (2004).

⁴ The plausibility of societal culture being deeply embedded in an individual's values is supported by my own observations as an international student during my doctoral studies in New Zealand. While it is

the core of the culture construct. Culture is the result of both cognitive processes (on the individual level) and social interaction at the group level.

4.2 Ontology

The study of ontology is concerned with the nature of reality. In the present research the question at hand is “where is culture located?” and is a logical predecessor to the epistemological question “how can we learn something about culture?” Being a highly abstract construct, culture does not present itself unmediated to the inquirer. The conceptual definition that was developed in the previous section serves as a logical point of departure toward framing the ontological status of culture.

Depending on the (often implicit) assumptions of the researchers, studies – and consequently their findings – can vary widely. The need to make the assumptions of the research approach explicit has been exhorted often, particularly in qualitative research (Braun & Clarke, 2006). These assumptions resemble mathematical axioms and thus cannot be proven or disproven (Guba, 1990). By disclosing the ontological and epistemological assumptions of this study I would like to give the reader the possibility to view the findings in context and critically reflect upon them.

4.2.1 Duality of culture

As a group level construct, it is not evident whether culture resides within individuals or is only “intersubjectively available”. Markus and Hamedani (2007), explained aptly in this connection that meanings “refer to constructed entities that cannot be located solely in the head of the meaning maker or solely in the practices or products of world; they are always distributed across both” (p. 9).

hard to put ‘one’s finger on it, it seemed that all my international friends and colleagues, be it of French, American, Brazilian, Pakistani or German nationality, maintained their ‘cultural distinctiveness’ even after several years of living in a different socio-cultural environment and exposure to many different new cultures. While this ‘distinctiveness’ was not necessarily enacted in a group setting involving many different nationalities, it became a lot more obvious when in a largely culturally homogeneous group (which happened surprisingly often, too).

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The culture of a given group is on the one hand the result of individual meaning-making but is on the other hand always also a product of the cultural context in which the individual is located. Although initiated by individual cognitions, meanings become eventually part of the social environment (Berger & Luckmann, 1966). Thus culture is both cognitive *and* social in nature, it resides both within individuals *and* is located in the group; it is both internal *and* external to an individual, both static *and* dynamic.

This is what I will refer to as the **duality of culture**, which is central in this thesis: One source of meaning resides *within* individuals (as deeply internalised cultural values), but only through social interaction within the group and other contextual factors (i.e. sources of meaning *outside* the individual) it is socially produced and reproduced and becomes a shared meaning system. A group's culture is in a permanent process of coming-into-being through the perceptions and interpretations (i.e. ascriptions of meanings) of organisational members. Figure 8 illustrates the reciprocal link between individual meaning-making and the group culture. Individual meaning-making collectively constitute the group culture as a shared meaning system which, in turn, shapes individual meanings. The arrow at the top of Figure 8 constitutes the *cognitive* link, while the bottom arrow reflects the *social* link.

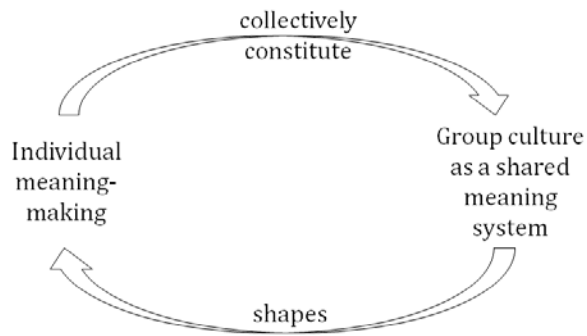


Figure 8: Reciprocal link between individual meaning-making and group culture

On the other hand, values inhere in individuals while meanings are socially produced and reproduced from these values and the social setting. The underlying assumption is that the values of individuals that stem from the societal (childhood) socialisation remain largely intact and distinct when working in organisations, although not

necessarily always salient in the process of social interaction. This implies also an element of stability as opposed to the temporal nature of culture as a result of ongoing construction and re-construction of ethnographic writers (e.g. Geertz, 2008).

In summary, culture is *process* and the *dual product* of both the internalised values that employees take to their workplace and the social dynamics of the group. In the words of Brannen and Kleinberg, (2000) culture is “persistent, [but] still dynamic” (p. 400). This stands in stark contrast to functionalist research that looks at culture as something static, “out there” (i.e. a realist ontology), that can be objectified and accurately depicted by a single cultural “key informant”⁵.

4.2.2 Continuous improvement

Another core assumptions made in this study refers to the use of the CI⁶ as the umbrella term covering approaches such as TQM, Lean Production, Business Excellence or Six Sigma.

The literature is subject to trends in which some management concepts swing out of fashion, while others with very similar or even identical content become fashionable (for a critical discussion see, for instance, Klefsjö, Bergquist, & Edgeman, 2006; Pettersen, 2009b).

Furthermore, in accordance with a cultural perspective, practices are “translated” into a local context through the meaning-making of organisational members. Therefore, I argue, it is more adequate to abandon the use of categorical distinctions such as “Lean Production” as opposed “TQM” in favour of the embracing umbrella term “CI”.

⁵ Culture as a shared meaning system could also be portrayed from an objectivist ontology, as discussed in Appendix L.

⁶ The definition of the CI itself is ambiguous. While some authors use CI and kaizen as synonymous (Aoki, 2008; Steenhuis, Yokozawa, & de Bruijn, 2009), others like Lagrosen (2002) considers CI as one aspect of kaizen, along with ‘participation of all’. In the present study, CI and kaizen are used synonymously.

4.2.3 A culture of CI in metaphorical terms

Perhaps an analogy⁷ will be helpful to further illuminate the concept of duality of culture.

The organisational culture is very much like a running river. A river is in a state of constant change⁸ but still it makes sense to talk about it as “a river”, i.e. a defined entity. Similarly, an organisational culture is constantly in a state of coming-into-being through the perceptions and interpretations of organisational members.

The flow of water in a river provides the energy that can be used, if channelled adequately, to drive e.g. a mill wheel. Likewise an organisational culture can be the driving force of CI in an organisation. As a weir for a mill will have a lasting effect on the flow of the river, so does CI impact the organisational culture.

Just as the movement of the water in the river at a given location is determined by the flow of water further upstream, an organisational culture at a given point of time is the result of a historical process.

Although the observer can only see the flow of water at the surface, there are other factors such as rocks or ledges in the river bed which are invisible at the surface but are nonetheless essential for the flow of the water. Likewise, the cultural values of individuals may be easily overlooked when investigating the group’s culture. But just as the obstacles or eddies are important for the character of the river, the individual ascription of meaning is essential for understanding the overall culture.

Thus the duality of culture can be understood in terms of the rocks and bends in the river, which are relatively stable but become only salient through the flow of water on

⁷ The idea for this metaphor originates from Jostein Gaarder’s (1996) representation of Hegel’s understanding of history as a running river.

⁸ Aptly portrayed by Heraclitus of Ephesus’ expression “Everything flows” or “*You can never step into the same river twice*” (Πάντα ῥεῖ).

top of them. It follows that the same rocks in the riverbed can result in a very different flow and characteristics of the river, depending on the water level.

In the same way that neither the rocks in the riverbed nor the water level, each taken alone, are sufficient to understand the characteristics of the river, an organisational culture can be understood as the result of a combination of more or less stable elements (individual cultural values that reflect the societal culture, organisational routines and the corporate philosophy) and a dynamic enactment process of meaning-making through which the organisational culture is continuously produced and reproduced.

4.3 Epistemology

Epistemology, the “theory of knowledge”, is the branch of philosophy concerned with the acquisition of knowledge. The question in the context of the present study is “how can we learn something about the role of culture for CI?” and builds directly on the ontological assumptions of this study.

4.3.1 Different approaches to culture

If culture were assumed to be a uniform, static entity “out there” that can be objectively described by its function as is the case in the functionalist perspective currently dominating OM/QM research, then surveying one single “key informant” in a figuratively “elevated” position in an organisation, such as the operations manager, would be sufficient. However, the moment one relaxes the ontological assumption that culture is an immutable, static entity and recognises that the group members actively contribute to the creation of culture through their meaning-making, this perspective becomes somewhat unsatisfying, if not fully inadequate.

I agree with Sinclair and Collins (1994) who assert that “the problem is that the current tools which are promoted [in the field of OM and QM], such as questionnaires and other limited survey techniques, do not allow us to really understand organizations. These give at best a partial view and so we can neither identify nor analyse culture in context” (pp. 26-27).

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As Goia and Pitre fittingly argued in this connection:

The assumptions of the functionalist paradigm... become problematic when subjective views of social and organizational phenomena are adopted.... The study of phenomena such as sensemaking, meaning construction, power, and conflict becomes very awkward to handle using any immutable objectivist framework. What is "out there" becomes very much related to interpretations made "in here" (internal to both the organization members under study and the researchers conducting the study). (1990, p. 587)

Indeed, if culture is understood as a dynamic, emergent property that is constructed through meaning-making of group members, it is a lot less clear "whether or not human beings can ever achieve any form of knowledge that is independent of their own subjective construction, since they are the agents through which knowledge is perceived or experienced" (Morgan & Smircich, 1980, p. 493).

Let us look at some alternative approaches. As Lewis (1996a) remarked, many scholars in OS concentrated on the study of language after Pettigrew (1979) had underlined the importance of organisational myths, symbols, ideologies, beliefs, and rituals for studying organisational culture. From this focus on language emerged what became known as the "linguistic turn" in OS (Heracleous, 2004).

While it is true that language enables us to articulate experience and meanings and that organisational culture becomes often manifest in parlance such as set phrases, processes and forms, I argue that language only reflects partial aspects of a culture. The importance of non-verbal processes and actual work practices limit the possibilities of the study of language as a "carrier" of culture. Moreover, front-line workers do not necessarily make use of linguistic nuances that would lend themselves to sophisticated discursive analyses.

This is in line with other scholars who argue that the near exclusive focus on language and discourse in the social constructionist perspective "has produced a corresponding lack of attention to other significant elements in human life" (Cromby & Nightingale, 1999, p. 2). Similarly, Alvesson (2004) declared that "an interest in cultural meaning

goes beyond manifest language use. From a cultural point of view meaning is not only based in language, but also in actions and artefacts, in taken-for-granted assumptions and ideas that people may have a problem in verbalizing" (p. 328).

While I believe that the study of language can be important to supplement other sources of insights, I argue that "a cultural approach to organizations would be language-sensitive, but not necessarily language focused" (Alvesson, 2004, p. 317). Specifically with regard to CI, the study of language, i.e. another "remote" method, is only conditionally suitable; I consent with Craighead and Meredith (2008) in that

it is becoming more important that we, as scholars, directly observe the reality that we wish to study, especially for developing rather than testing theory. As an applied discipline, OM scholars cannot fully capture the complexity of these phenomena through "remote" methods such as artificial reconstruction and/or surveys. (p. 723)

4.3.2 Learning about culture

As an ideational construct, a group's culture does not reveal itself easily to the beholder. Furthermore, an unequivocally undisputed point amongst scholars of both societal and organisational culture is that culture is best viewed as unconscious, below awareness or deeply internalised.

Smircich (1985) explains that "to study culture means to study social significance - how things, events, and interactions come to be meaningful. Studying culture means studying 'world making'" (p. 63). Schulz (1995) adds, "a cultural way of studying organizations is to study the meanings of organizational behavior - or more specifically, the meanings and beliefs which members of organizations assign to organizational behavior and how these assigned meanings influence the ways in which they behave" (Schulz, 1995, p. 5).

Guba and Lincoln (2005) write in this regard that "the meaning-making activities themselves are of central interest... simply because it is the meaning-making/sense-making/attributional activities that shape action (or inaction)" (p. 197).

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If meaning-making is understood as a dynamic, emergent process rather than a static, inherent property, then concepts and practices do not possess meaning independently. In accordance with duality of culture, it is not only necessary to study how individual cultural values relate to subjective meanings of CI but also the social context and conditions within the organisation that enable the accounts that are provided. Subjective meanings reflect the point of view of organisational member and therefore need to be studied in context (Evered & Louis, 1981)⁹.

Using the words of Oyserman, Kimmelmeier and Coon (2002), it is important to concentrate not only

on the features of situations but on the cultural-laden ways in which situations are construed – the subjective meaning they have for individuals. This approach integrates cultural psychology with social cognition by arguing that culture matters because it influences subjective construal of situations, and it is these subjective construals that should be the focus of our attention. (p. 113)

Consistent with the conceptualisation of culture in the present study the situational factors included leadership and organisational institutions, but also the dynamics that evolve within the group and behavioural consequences.

If meaning-making is at the core of the culture construct, it affects equally the researcher in his effort to make sense of his social environment. This makes the research an inherent part of the epistemology and will be discussed next

4.3.3 Role of the researcher

Following Schein's (1985) argument, an adequate method to study culture involves the interaction and exposure of an organisational outsider to the cultural setting. The researcher must expose himself to the group's culture and methodically study how particularly the behavioural aspects of CI (also referred to as 'infrastructure practices'

⁹ The relationship between a subjective and objective perspective on culture is discussed in more detail in Appendix L.

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in Naor, et al., 2008) or “soft criteria” (W. Lewis, G., et al., 2006) are ascribed their meaning through the individual and on the group level – and thus become effective.

However, if meanings are subjective and originate from the group members, he must refrain from imposing predefined categories onto the data; in other words, gain an insider’s or *emic* view of the group’s culture. The research process leads from data to theory, i.e. through an inductive rather than a hypothetico-deductive approach. Similarly, Sackmann (2001) argued that, “inductive research approaches applying qualitative methodologies are a sine qua non to grasp the core of culture and cultural complexity from the insider’s perspective” (p. 160).

What can be understood as out there (the group’s culture) is very much related to the processes “in here” in both the group members – *and* the researcher. Perhaps it is best to understand the researcher as an instrument that is immutably calibrated to one culture so that the output reading always reflects this calibration. If an understanding of culture emerges from the interaction of the researcher within a cultural setting, reflecting upon the researcher’s own culture is as important as describing the researched. Thus objectivity in a realist sense is impossible. It becomes imperative to disclose and critically reflect the researcher’s own cultural active or passive role within the research process – what I will discuss as *reflexivity* at the end of this thesis.

The concept of duality implies that studying a group’s culture involves tapping both individual cognitive processes of meaning-making as well as the cultural dynamics of the group setting. By implication, the role of the researcher shifts between the one of detached observation and explanation when analysing individual cognitions to one of active involvement, understanding and interpretation when deciphering the group’s shared meanings.

In this connection, Erez and Earley (1993) wrote that “the differing roles of the researchers in the cognitive versus interpretive approaches to understand cultural systems is striking” (p. 66). Similarly, Calás and Smircich (1987) explained that

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traditionally, explanation and understanding are framed as opposite ways of knowing and pursuing inquiry. Explanation, as evident in positivist science, follows the model of the natural or physical world in which hypothesis testing, experimentation, verification or falsification, and generalizations are expected. Understanding, in contrast, relies on interpretations of subjective meanings; thus generalizations are not required or expected. Explanations takes the view of the world from the outside, while understanding takes the view of the world from the inside. (p. 232)

Put another way, the above mentioned different roles of the researcher imply a crossing of paradigmatic boundaries. Consequently the next section is concerned with the possibility to combine research practice from different paradigms.

4.3.4 Paradigm incommensurability

According to Guba (1990), a paradigm is a "a basic set of beliefs that guides action" (p. 17) in research practice¹⁰. The main contrasting paradigms in the study of culture are functionalism and interpretivism. They have developed from different scientific traditions (Schultz & Hatch, 1996). The assumptions of functionalism were described and critically analysed as part of the literature review. As opposed to the functionalist worldview, where reality is simply seen as "out there" and can be discovered in an objective way, the world in the interpretivist perspective is socially constructed and therefore inherently subjective.

Just as with functionalism, there is little clarity around the terms associated with it. Generally speaking, the interpretivist paradigm is associated with the *subjectivist* approach to research and views reality as *socially constructed*; the use of these terms usually indicates reference to features of the interpretivist paradigm. The distinctive approaches to cultural studies are contrasted in Table 6.

¹⁰ The conceptual parallels to the notion of culture are evident, as already suggested in Chapter 3.6 "Cultures of Culture Research".

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As mentioned before, the culture movement was initially the “code word for the subjective side of organisational life” and “its study represented an ontological rebellion against the dominant functionalist or ‘scientific’ paradigm” (Meysen, as cited in Cheyne & Loan-Clarke, 2009, p. 250).

Table 6: Differences between the functionalist and interpretivist paradigms in cultural studies in organisations (extended from Schultz & Hatch, 1996)

| | Functionalism | Interpretivism |
|----------------------------------|--|---|
| Analytical framework | <i>Predefined and universal:</i> Similar levels and functions of culture are assumed to exist in all organisations. | <i>Emergent and specific:</i> Opportunities for the creation of meaning are unique in each context. |
| Stance of researcher | Remote, disinterested researcher | Researcher becoming part of the evolving culture-bearing events to see the culture from the perspective of an organisation “insider”. |
| Level of interest | Organisational function (level of individual employee is viewed as idiosyncratic unless he or she can be seen a “key informant”) | Meanings are deemed adequate at the level of individual employees. |
| Model of analysis | Categorical: Causal relations between cultural elements | Associative: Meanings and the association between them |
| Analytical process | Convergent: Condenses and brings elements of cultural analysis together. | Divergent: Expands and enriches data. Apply interpretative schemes, discern patterns but preserve unique representation. |
| Mode of theory generation | Deductive, highly structured | Inductive and cyclical: Generation of theory and further data collection are intertwined. |
| Aspired theory | Universally applicable | Mid-range |

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The differences in research practice were repeatedly cause for dissent, and as in the case of the “culture wars” in OS that were described as part of the literature review, and sometimes staged in the open: Lincoln (1990), a self proclaimed constructionist (and therefore adhering to the interpretivist paradigm), stated that "accommodation between paradigms is impossible" (p. 81) and argued that

the socialization process associated with each paradigm are sufficiently divergent, and the emotional and political commitments so high, that a mix-and-match strategy, at either the axiomatic or the practical level, is likely to produce little more than internal dissonance in the research process, a form of discursive incoherence that renders the findings useless for both groups. (p. 81)

In line with this argument, a study that crosses paradigmatic boundaries would undermine its own credibility and be compromised by its very existence.

However, shortly after the influential work of Burrell and Morgan (1979), which popularised the idea paradigm incommensurability in OS (see Figure 9; the paradigms of interpretivism and functionalism that are displayed in the bottom half of the figure, are most relevant for this study), i.e. the impossibility for a researcher to operate within more than one paradigm at a time, others scholars began to dispute this idea. Morey and Luthans (1984), for instance, did not consider subjective and objective approaches to organisational studies mutually exclusive, but complementary.

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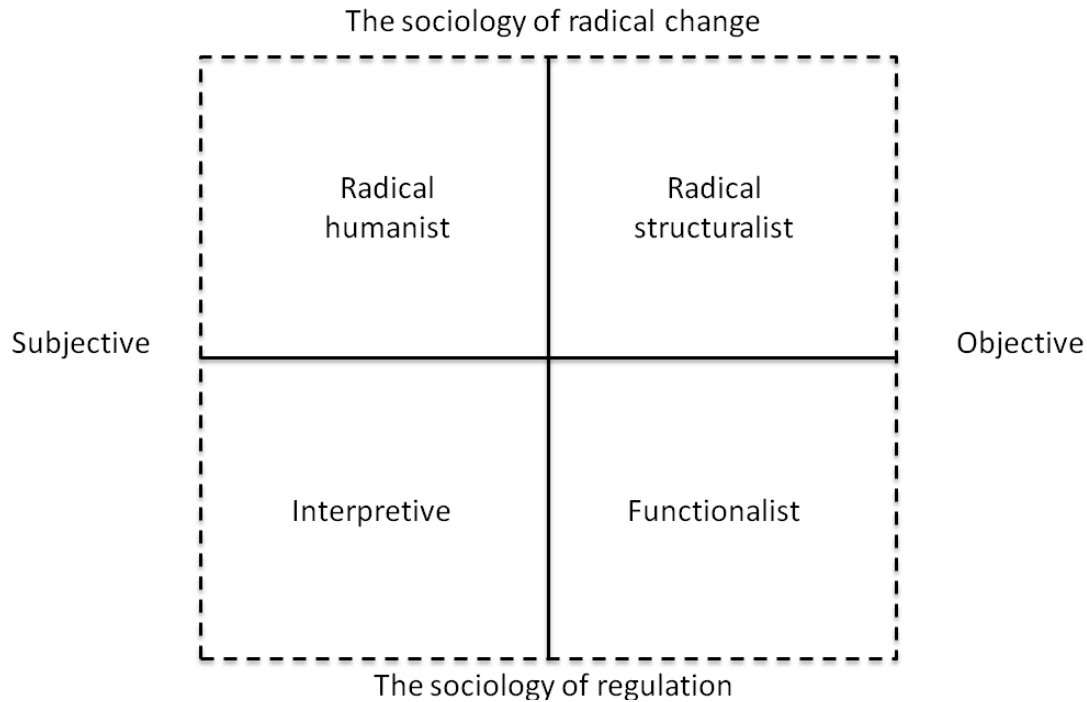


Figure 9: Burrell and Morgan's (1979) typology of paradigms for the analysis of social theory
(Source: Burrell & Morgan, 1979, p. 22)

Other scholars followed and proposed approaches to reconcile paradigmatic differences, many of which in cultural research, such as the “paradigm interplay” (Schultz & Hatch, 1996), “metatriangulation” between paradigms (M. W. Lewis & Grimes, 1999), “multiparadigm perspectives” (Gioia & Pitre, 1990), the “multiple cultures perspective” (Sackmann & Phillips, 2004), “multiparadigm inquiry”, (M. W. Lewis & Kelemen, 2002), “paradigmapping” (Lowe, Moore, & Carr, 2007) or one paradigm informing another in sequence (Gioia, Donnellon, & Sims Jr, 1989).

However, it is clear that the demarcation lines between “existing research paradigms cause biases in information search and block opportunities for collecting and interpreting data that contradict existing paradigms” (Erez & Earley, 1993, p. 10). Therefore, as Sackmann (2001) argued, a “thoughtful assessment and research efforts apply not only a combination of data collection and data analysis methods, they are also able to *combine different research paradigms* and create inventive research designs to take into account the specifics of the concept of culture and its complexity within organizational settings” (2001, p. 153, emphasis added). Similarly, Erez and

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Earley (1993) suggested viewing the different viewpoints as “as complementary rather than competing” (p. 66).

The argument of paradigm incommensurability can also be challenged from another perspective: Recently, Magala (2008) described the idea of paradigm incommensurability as merely a “defensive doctrine” and asserted forcefully that “in their quest for defence weapons against neopositivism... postmodern social constructivists had embraced radical incommensurability thesis... and applied it to their footholds in academia, which they wanted to defend against the neopositivist onslaught” (p. 243).

Similarly, Cromby and Nightingale (1999) argued that the radical social constructionist position of

Relativism is not just a theoretical perspective or philosophical claim. Relativism is simultaneously a culturally offered rhetorical resource that can be drawn upon to disparage 'realist' arguments (as unsophisticated, as failures to understand the subtleties or nuances of relativists' claims and so on), and so avoid the need to take seriously the entirely reasonable questions that are being raised. (p. 9)

They concluded that “the discursive turn [i.e. the constructionist focus on language and discourse] is threatening to become a discursive retreat” (p. 13).

In summary, there is a dispute amongst scholars as to whether research approaches can cross paradigmatic boundaries. While earlier contributions tend to adhere to the “paradigm incommensurability” position, there are increasing doubts about both the general idea of paradigm incommensurability and the rationale behind it. A number of scholars of culture have suggested that the positions are complementary and demanded to combine the power of different paradigms to gain more meaningful insights. For further discussion concerning the compatibility of different theoretical perspectives on culture see Appendix L.

4.3.5 Paradigmatic positioning of this study

Due to what I described as the duality of culture, the present study does not fit neatly into any of the existing paradigms as described in Burrell and Morgan's (1979) well-known typology (see Figure 9) – it is neither only “out there”, ready to be objectively observed (i.e. a naïve realist ontology) nor is it purely an ongoing social construction¹¹ (i.e. a constructionist ontology). In the conceptualisation of culture underlying this study, culture is the result of both individual cognition *and* social processes.

I adjust the social construction of reality an essential role for the understanding of culture, but I refuse to confine the study of culture to language and discourse, as in the case in the “linguistic turn”. Like others before me (e.g. Cromby & Nightingale, 1999), I reject to leave aside essential sources of meaning that lie largely outside the sphere of language and discourse, such as organisational institutions, constraints inherent in the socialisation of people (implicit in internalised value orientations), non-verbal processes and work practices.

Moreover, I argue that the rejection of naïve realism does not imply the need to adopt an extreme relativistic position. The deficits in representation of reality in our data and reports do not, in my view, implicate that we as scholars can resort to pointing out the futility of “the modernist project”. On the contrary, it increases the need to scrutinise our assumptions, methods and knowledge claims. In this sense I agree with Philips (1990) in that “it simply does not follow from the fact of social construction of reality that scientific inquiry becomes impossible or that we have to become relativists” (p. 42).

¹¹ Two different terms are often used in relation to socially constructed realities: Social constructionism and social constructivism. Although the definitions differ, social constructivism is more concerned with the individual's meaning-making whereas social constructionism focuses on the emergence of phenomena relative to the social context. Put another way, while constructivism deals with individual psychologies, constructionism takes a sociological perspective. Therefore they are complementary views on the same process of socially constructed reality (Berger & Luckmann, 1966).

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Thus the study preserves a cautious and critical ontological stance similar to what Miles and Huberman (1994) described as “transcendental realism”, meaning that

social phenomena exist not only in the mind but also in the objective world – that some lawful and reasonably stable relationships are to be found amongst them. The lawfulness comes from the regularities and sequences that link together phenomena. From these patterns we can derive constructs that underlie individual and social life. The fact that most of those constructs are invisible to the human eye does not make them invalid. (p. 4)

It also maintains the principal desirability of truth, i.e. seeking to understand these “lawful and reasonable stable relationships” but it abandons an objectivist approach. Instead, it acknowledges that culture is not “out there”, ready to be revealed, but emerges from the *interaction* of the inquirer with the phenomenon¹².

By relying on different sources/methods of insight and critical reflection upon the bias of each method (i.e., an “elaborated triangulation” (Guba, 1990, p. 21)) it is possible to minimise the distortions. In this sense, “it is essential that the “findings” of an enquiry be based on as many sources – of data, investigators, theories, and methods – as possible” (Guba, 1990, p. 21) ¹³.

¹² This insight, however, is not even new for the natural sciences. Nobel laureate Werner von Heisenberg who formulated the uncertainty principle in quantum mechanics, for instance, once stated “what we observe is not nature itself, but nature exposed to our method of questioning” (as quoted in Capra, 1996, p. 40). Thus, objectivity is impossible in an absolute sense.

¹³ This paradigmatic positioning resembles, in part, what Guba (1990) labeled ‘postpositivism’. However, I consider this label unfortunate and perhaps misleading since the term ‘postpositivism’ is sometimes associated with the metatheoretical stance that resulted from the critique of logical positivism (Ritzer, 2007). While logical positivism implies the *verifiability* of insights, Popperian postpositivism takes a more cautious stance arguing that while a hypothesis cannot be verified, it can be maintained as long it does not have to be rejected through *falsification*. Other than that, Popperian postpositivism preserves by and large the naïve realist and objectivist stance of the positivism geared towards the natural sciences.

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Similarly, a critical reflection on the inquirer's role and dispositions in the research process enables the reader to make her or his own judgement.

Consistent with the above argument, I argue that cognitive and interpretive positions are mutable complementary, not irreconcilable. Surmounting paradigmatic boundaries is not unusual, perhaps even necessary in meaningful cultural research. The label "interpretive" is appropriate for some elements of this study because it seeks to understand culture not based on the researcher's view and categories, but from those of the participants in the socio-cultural context studied (Maxwell, 2002). At the same time, however, it refers to elements normally associated with "positivist" approaches such as the Erez and Earley's (1993) theory of cultural self-representation. It does so for different purposes – while it looks for an emic understanding of social processes through interpretative techniques ("social" link in Figure 8), it applies a cognitive perspective in the individual meaning-attribution ("cognitive" link in Figure 8). I attempt to combine these different views toward a holistic perspective on culture.

In conclusion, I argue that culture can neither be understood adequately as a psychological property inhering inside of individuals, nor is it reducible to discourse, but as a result of the dual nature of culture. Therefore neither a naïve positivist, nor a purely social constructionist view is suitable to gain a holistic understanding.

By viewing the organisational culture as product of cognitive processes of meaning-making and an ongoing social construction in the group, this study leaves the "comfortable but shallow moorings of absolutistic thinking" (Kluckhohn & Strodtbeck, 1961, p. 1). As Marshall (1990) put it, "researchers cannot avoid the ethnocentrism of their field without methods that explore beyond dominant paradigms" (p. 196).

By implication, this study is located between the extreme poles of interpretivism and functionalism. Acknowledging the role and importance of the subjective ascription of meaning to CI practices in organisations does not entail a relapse into relativism or the impossibility to gain transferable insights. However, it represents a significant departure from more traditional approaches and requires careful considerations of

the philosophical foundations of the knowledge gained. This has set the stage for discussion of the underlying values in the following section.

4.4 Axiology

The discussion of the ontological and epistemological assumptions provided the basis for an examination of the values underlying the present study. In the following I will briefly outline these values using Stablein and Nord's (1985) framework of cognitive interests.

Through the choice of the data sources and methods our research practice gives audience to certain categories of people in organisations, while silencing others. It elevates and empowers certain persons and disempowers others. Thus, scientific inquiry can be understood as a *political* act. Guba (1990) aptly summarised, "because they are human constructions, paradigms inevitably reflect the values of their human constructors" (p. 23). For instance, the functionalist paradigm is concerned with "knowledge that can be put to [managerial] use" (Burrell & Morgan, 1979, p. 26); accordingly it gives a voice primarily to those in management positions in organisations.

Based on Habermas' (1966) epistemological framework of cognitive interests, Stablein and Nord (1985) describe three types of knowledge that can be obtained in cultural research (symbolism). *Technical* knowledge is concerned with the control and manipulation of organisational settings, often identical with a managerial interest. *Practical* knowledge is concerned with understanding of meanings and expectations in specific situations such as consensual norms between individuals with the aim to enhance human social interaction. The third type is *emancipatory* knowledge, the most fundamental type of knowledge. It is the pursuit of knowledge for knowledge's sake and implies the striving for human autonomy and maturity. It refers to the interest in enhancing human self-knowledge, autonomy and responsibility through critical self-awareness and reflection upon the environmental or institutional forces which restrict the options and rational control in our lives.

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In this sense, functionalist research generally seeks technical knowledge as it is largely in line with managerial interests of enhancing functioning and control of organisations (Burrell & Morgan, 1979). Its research practice centres at the use of mostly managerial “key informants” in organisations and thus elevates persons in management positions in cultural research, while disregarding common employees.

The epistemological position of the present study, however, implies that an understanding of the work group members’ perceptions and interpretations is essential to understand the culture, rather than to seek only the evaluation of (metaphorically) elevated figures in the organisation such as managers. This implies that “learning *from* the organisational members” rather than “learning *about* the organisational member” has central significance to this thesis. Understood like this the present study gives a voice to common group members in the research process and thus adds a practical dimension to the knowledge sought by this research.

However, it should be noted that the ultimate purpose of this study is to increase organisational effectiveness through a better understanding of the role of culture for CI. In this sense, the present study seeks both technical and practical knowledge.

4.5 Chapter Summary and Conclusion

In order to understand the simultaneous role of societal and organisational culture for CI, I first abandoned a functionalist perspective which looks at culture in terms of its outcomes rather than its origins.

Whereas in functionalistic approaches to culture “the problem of meaning is sometimes ignored, and in other cases treated as a rhetorical gloss with few implications” (Parker, 2000, p. 67), I conceptualised a group’s culture as a shared meaning system.

The conceptualisation of culture as a shared meaning system allowed to “unpack” a group’s culture, in terms of the individual meaning-making as well as the conditions that foster the ascription of meanings. Using a cognitive conceptual definition of

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culture as starting point I developed a theoretical framework that links individual values and the wider societal culture to the emergent group culture.

Consequently I described the ontological and epistemological position of this study, which presents a significant departure from the dominant paradigm of functionalism.

Having outlined 'what' culture is (conceptual definition), 'where' it is located (ontology), 'how' one can find out about it (epistemology), 'for whom' (axiology) it is adequate to proceed to the 'by which means' culture can be probed (methodology/research design) in the following chapter.

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5. Research Design

Rigour lies in devising a systematic method whose assumptions are congruent with the way one conceptualizes the subject matter.

(Reicher and Taylor, 2005, p. 549, as cited in Braun & Clarke, 2006, p. 96)

5.0 Introduction and Overview

The conceptual definition of culture and the discussion of the ontological and epistemological foundations serve as a point of departure for the development of the research design of this study.

During the conceptual stage of the research project and prior to pilot data gathering, several open-ended interviews with experts from both academia and organisational consulting were conducted. These greatly contributed to the final research design, which will be described in considerable detail in the following. Once more, I would like to express my gratitude for this invaluable contribution to the project.

This chapter consists of four main parts: In the first I will formulate the research questions and explain the rationale for the overall (case study) approach. The second part delineates the sequence of data gathering methods that is applied within each case. The third part describes the data reduction strategies that are applied to the data. And finally the last part outlines the strategies that are used to link data sources for synthesis within and across cases.

5.1 Overall approach

5.1.1 Research questions

Understanding of theory and practice in current research enables the research questions to be placed in context. To formulate the questions, I will briefly reiterate the main shortcomings of functionalist culture research in OM/QM that were identified in the analysis of the literature (compare Section 3.7.2):

(a) *Exclusive attention to organisational function*: Organisational culture is viewed in terms of its function for the organisation rather than its origins in the shared meanings of organisational employees.

(b) *Inadequate de-contextualisation*: Organisation practices are de-contextualised through the use of remote methods and pre-defined frameworks;

(c) *Disjointed perspectives on organisational and societal culture*: organisational and societal cultural features are not considered simultaneously;

To address these shortcomings, I argue, it is necessary to explore organisational cultures of CI in a “bottom-up” approach by viewing culture in terms of the meanings shared by the workforce. This leads to the following research questions:

1. How does CI become meaningful to individuals and what are the key themes of the meanings underlying CI?
2. What are the conditions and organisational features that assist in or constrain the development of these meanings?
3. What are the processes through which these meanings are shared and ultimately become a group’s culture?
4. How do these shared meanings guide action toward CI and which role does a corporate philosophy play in that process?
5. How does societal culture impact the shared meanings in organisations?

5.1.2 Overall study design: Multiple-case study

Throughout the research process, many important decisions in relation to the methods used, the selection of respondents, organisation and analysis of data have to be made. Many of these decisions mean a departure from established practice in OM. It is important to acknowledge and recognise them as decisions made consciously; they reflect the conceptual understanding of culture, the research questions and ultimately the shortcomings of current research practices they are trying to address.

The immediate implications of these shortcomings (compare Section 3.7.2) for the requirements of an alternative, better informed study design are detailed in Figure 10.

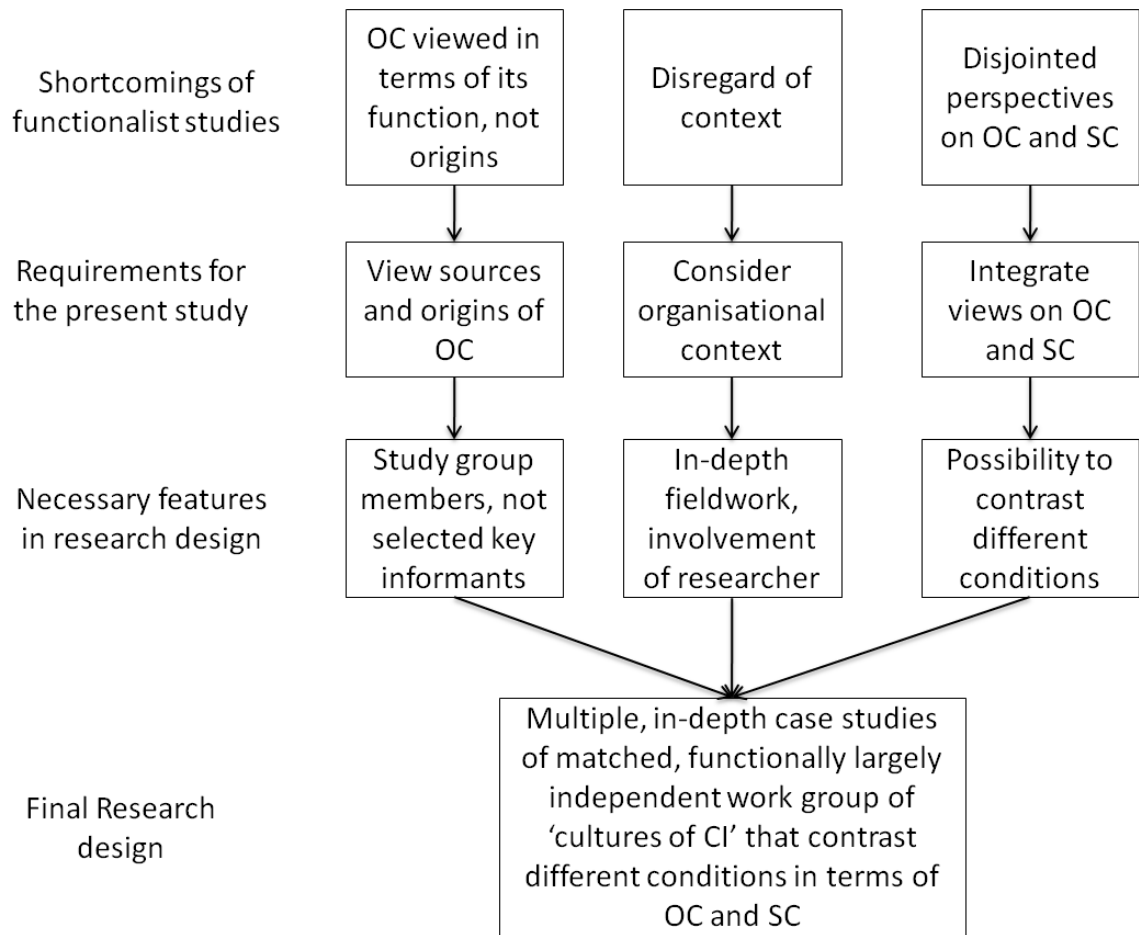


Figure 10: Links between shortcomings of existing studies and proposed research design of the present study (OC= organisational culture, SC = societal culture)

I will now have a closer look at some of the key features of the research design: Organisational context is assumed to play a key role for the role of culture in organisations (Sinclair & Collins, 1994). Therefore a meaningful study of organisational culture requires an in-depth research on-site to gain a holistic understanding of the complex relationships between the organisation and its context (Hill, et al., 1999). Figure 11 shows the spectrum of different research approaches in terms of the “closeness” to the researched phenomenon. In line with the above argument, an ideal research approach into culture would be located toward the right hand side of the spectrum.

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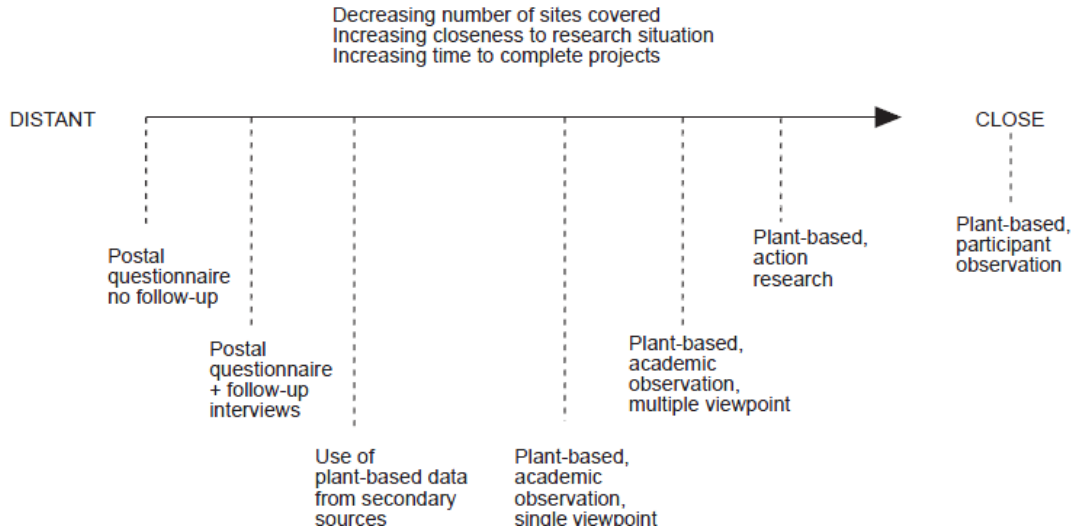


Figure 11: Spectrum of empirical research in OM (adapted from Hill, et al., 1999, p. 146)

The case study approach is particularly well suited when the limits between the phenomenon of interest and its context are not clearly defined (Yin, 2009). Moreover, case research is arguably an appropriate method for building explanations for complex phenomena in OM research (R. Sousa & Voss, 2008). This certainly applies to the role of culture for CI, where there is no clear direction of a cause-effect relationship – culture impacts CI practices and practices are assumed to change culture.

In line with the research questions – to explicate conditions, organisational features and processes – a plant-based case study approach is therefore highly adequate. Similarly, Haijo (2009) encourages “studies [of culture] employing case histories, interviews, grounded theory, sense-making, content analysis, in depth case-studies or multiple-case studies and other unrepresented methodologies” (p. 38).

There are several interesting case studies in the literature that investigated the role of both societal and organisational culture for CI and provide examples of how attention to rich contextual background can elucidate the role of culture (e.g., d'Iribarne, 2002; Maull, Brown, & Cliffe, 2001). However, these are typically isolated cases which do not allow for systematic comparisons and conclusions beyond the specific cases.

Therefore multiple, carefully selected cases were deemed essential to methodically compare different conditions. As Sackmann (2001) asserts, the findings would be bound to the specific case unless the case studies were designed and matched for comparison. In this sense, transferable insights can only be gained through carefully comparing and contrasting results from systematically selected and matched cases. Thus, although drawing on subjective data, the insights can be “objectified” through inter-level and cross-case analyses. In the words of Morey and Luthans, this approach follows a logic that is “idiographic, but has nomothetic potential” (1984, p. 35).

A case study replication logic allows the systematic comparison of findings between cases with different conditions of societal and organisational culture. The cases are either chosen to represent similar settings (literal replication) or contrasting conditions (theoretical replication). Such a replication logic (Yin, 2009) has some resemblance with a maximum variation sampling strategy, as suggested by Miles and Huberman (1994).

As units of analysis (cases), functionally largely independent work groups were deemed most appropriate. They are more likely to show a high degree of cultural homogeneity than entire organisations and would therefore minimise perturbing¹ effects of subcultures (Louis, 1985). In line with this argument, a work group culture can be understood as the basic building block of an organisation’s culture.

By implication, this study cannot characterise the entire organisation’s culture, but rather aims at an understanding of the mechanisms and conditions that lead to shared meanings toward CI within the *specific* work group. This is in line with the research questions of this study.

Summing up, the importance of context implied that the case approach is a highly suitable way to structure the present study. An in-depth involvement of the

¹ Subcultures are, of course, not “perturbing” *per se*. However, since the research questions and objectives do not centre around the role of subcultures, the occurrence of strong cultural subdivisions within the group would add an additional variable unaccounted for in the case study design.

researcher through fieldwork is considered paramount to ground the study thoroughly in the real-world phenomenon. The use of matched, multiple cases within a replication logic can be used to study how conditions differ across distinct cultural settings.

While the case study approach frames the structure and theoretical grounding of the overall approach, it does not imply how empirical data is collected within a case study, to which I will proceed in the next section.

5.1.3 Implications of the conceptual definition for an empirical study

This section links back to the conceptualisation of culture introduced in the previous chapter. This conceptualisation provides us with a clear understanding of the culture construct. More importantly still, it gives us also cues as to how to tap culture in an empirical study.

Although the culture of a group is an intangible, socially constructed phenomenon, it is possible to tap several leads and accounts to follow the process of this social construction. Therefore I will move on to examine several key themes of its conceptualisation, which will be highlighted in *italics* in the following subsections.

5.1.3.1 Individual meanings

If a group's culture constitutes shared meanings, then an empirical study should analyse the meaning-making of individual group members as a key process for the emergence of shared meanings. This is in line with Ahmed, Loh and Zairi' (1999) argument that highlighted the need to focus on individual actors for the analysis of a culture of CI. Similarly, Bright and Cooper's (1993) underlined the need to understand "how the nebulous message 'that is quality' will be interpreted and enacted" (p. 24). Although *individual meaning-making* is at the ideational level only, meanings shape the individual's experiences related to CI practices, create expectations and prioritise one definition of a social situation over others.

The duality of the culture construct suggests that the one source of meaning lies in individual cognitions as a result from internalised values while this is complemented

by a second source, social processes. If this individual meaning-making is in part result of *internalised values* that reflect societal cultural values, then it is important to tap these values (as far as possible) beforehand and view the process of meaning-making in the context of these internalised values.

5.1.3.2 Shared meanings

Individual meanings shape behaviour and social expectations in the group so that meanings become shared and thus form the group's culture. They become part of the social environment in the organisation (Berger & Luckmann, 1966).

Thus learning about an organisational culture is about "learning the consensus meanings ascribed by a group of people to their experience and articulating the thematic relationship expressed in this meaning system" (Smircich, as cited in Ogbonna & Harris, 1998, p. 275).

More specifically, shared meanings enable common *espoused values* within the group. However, while espoused values can give important cues regarding the group's culture, they do not necessarily reflect deeper, tacitly held meanings (Schein, 2004) and should be viewed in the light of other evidence.

It follows that the researcher should also be concerned with potential antecedents and conditions under which shared meaning-making toward CI takes place, such as *group dynamics*, the role of *organisational leadership*, the *corporate philosophy* or the societal culture and the dynamics between them.

For instance, it is important to investigate what organisational leaders do to increase an individual's propensity to adopt meanings such as implied in the group's culture. Likewise it is important to understand the process of how values underlying the *corporate philosophy* are disseminated or embodied in routines or *physical aspects of the workplace* throughout the organisation. This is in line with Spencer (1994), who recommends an interpretive approach to "examine the process of meaning creation in TQM" (p. 467).

5.1.3.3 Behavioural aspects

In turn, it is important to observe the mechanism of how these shared meanings can lead to coordinated action toward CI within the group. Deeply held and shared meanings are enacted in social situations. Therefore they are most likely to become salient in appropriate situations such as meetings that need to be carefully observed. Gibson, Maznevski and Kirkman (2009) explained further that “culture influences the sense we make of social interactions – what seems central versus peripheral, what is desirable or valuable, normative or accepted, ultimately influencing how information is perceived, encoded, processed, and remembered” (p. 58).

5.1.3.4 Summary

Summing up, I have broken down the conceptualisation of culture into key themes that will inform the empirical part of this study. The leads to empirically tap a group’s culture are:

- (a) Internalised individual values
- (b) Individual ascription of meanings
- (c) Espoused values of the group
- (d) Shared meanings
- (e) Social processes and group dynamics
- (f) Leadership behaviour
- (g) The corporate philosophy
- (h) Organisational routines
- (i) Physical aspects of the workplace.

The following section describes the methods to be used in each case study to tap these leads.

5.2 Within-Case Sequence of Methods

In previous section I have explained the leads that the conceptual definition provides to capture a group's culture empirically. This section works to explain the particular methods required.

First I will describe the rationale for combining multiple, both qualitative and quantitative methods and give an overview over the whole sequence. In the following sections, I will explain each of the used methods in more detail.

5.2.1 Linking qualitative and quantitative methods

The scarcity of knowledge with regards to the role of culture in the area of OM/QM is in – at least in part – due to the methods used. Metters (2008) noted recently “there are many operational topics that may have significant cultural content, but the standard toolset of the OM researcher is not equipped to elucidate or even uncover them” (p. 743). It seems like this “processual and local experience of organizational life” (Parker, 2000, p. 79) cannot be grasped by pre-defined questionnaire items, but requires in-depth analysis.

Scholars in management disciplines have presented interesting interpretive approaches to gain more holistic insights of culture, such as in project management (Chen & Partington, 2004) or information systems (see Babaheidari, 2007). Even some functionalistic-oriented scholars of OS argue for the use of a combination of multiple, in-depth methods in the study of culture. For instance, Schein (1984) asserts that “if we are to decipher a given organization's culture, we must use a complex interview, observation, and joint-inquiry approach” (p. 14). Likewise in OM/QM, some authors who investigate the role of culture for CI strongly recommended the use of multiple methods (Sinclair & Collins, 1994).

While some argue that the uniqueness of the organisational culture makes it impossible to use quantitative methods (for instance, Smircich, 1983a), others suggest the triangulation of different methods (e.g. Sackmann, 2001; Stake, 2005). While qualitative methods are more suitable to gain in-depth insights, quantitative methods

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can be helpful for comparative purposes. Thus qualitative and quantitative methods are best seen as complementary.

Within each case, a sequence of several data gathering stages is performed (see Table 7). Note how each of the methods taps different cultural leads that were identified in the previous section.

I follow the advice of Miles and Huberman (1994, p. 41) who illustrated how quantitative and qualitative methods can be linked: An initial survey of organisational culture and CI practices is followed by individual interviews, direct observations and a concluding group workshop, which combines quantitative and qualitative aspects. This sequence is applied in an identical way in each case study to allow for cross-case comparison. It is pre-tested and fine-tuned in a separate pilot case study.

Table 7: Stages of the within-case research sequence (based on J. P. Wagner, et al., 2009)

| Stage | Method | Cultural lead | Purpose | Description |
|-------|-------------------|--|---|--|
| 1 | Survey | Espoused values of the group | i) Espoused values, juxtaposition to societal culture. ii) Identify potential sub-cultures within the group | Sampling: census of the selected group. Ideal group size: 20 employees |
| 2 | Observations | Leadership behaviour; physical aspects of the workplace; Organisational routines; social processes | i) Understand operational practices. ii) Make contact (“breaking the ice”) with employees, select employees for subsequent interviews. | Direct observation and participant observation |
| 3 | Interview | Part A: Internalised individual values | Understand the social self-concept of employees | Interview TST test procedure |
| | | Part B: Semi-structured interview: Individual ascriptions of meanings | i) Appreciate the meanings of individuals in the organisation ii) Extract emerging cultural themes for the subsequent group workshop | Semi-structured and open-ended interviews with a cross-section of employees (hierarchical level, gender, age, employment status and tenure, ethnicity) |
| 4 | Group work-shop | Social processes and group dynamics Leadership behaviour; Shared meanings | Using a cross-section of the group to develop a quantitative representation of the importance of the cultural themes extracted in the previous stages in terms of how <i>typical</i> and <i>beneficial for CI</i> they are being perceived. | Thematic analysis, inspired by (Mizuno, 1988; Schein, 1991, 2004). The resulting graphical representation (see Figure 12) is as important as the discussion process itself and the group dynamics that leads up to it. |
| 5 | Document analysis | Corporate philosophy | Analysis of prescribed managerial values | Thematic analysis |

The use of a sequence of different methods is not for the sake of methodological triangulation in a conventional sense, i.e. simply “the use of multiple methods to study the same problem” (Janesick, 1994, p. 219). Rather, the distinct methods are used to empirically tap *different* leads in the process of social construction of the group’s culture, reflecting the conceptual definition of culture.

Summing up, the challenge of this study is to develop a holistic method to inquire a group's culture that is methodologically precise and rigorous and at the same time well-grounded in the real-world. The study uses matched, in-depth case studies of workgroups to attain systematic comparisons of how a culture of CI is embedded in different socio-cultural settings. The explicit conceptualisation of the culture construct of the previous chapter helps us to *unpack* culture, i.e. look at different aspects and stages in the process of its social construction. Within each case, it uses a sequence of interlinking methodological stages that draw on different data sources in order to extract both quantitative and rich qualitative data, which will be explained in the following sections in largely the same chronological order as applied in each of the case studies.

5.2.2 Survey

In accordance with the ethical approval² given for this study all participants receive an information sheet detailing the approach and purposes of this study and sign a consent form in which they can also choose in which parts of the study (survey, observations, interviews, and group workshop) they would like to participate. Participants could withdraw from the study at any point³.

The initial step of the within-case sequence of methods is a pen and paper survey which comprises questions from previous research on both culture and CI. But as opposed to much of the existing studies this is not used for hypotheses-testing, but designed as a resource-efficient way to gain a tentative understanding of the espoused cultural values and CI-related practices held in the group.

I agree with Lewis (1996a) in that, "if we accept that people's basic assumptions are often unconscious and their espoused theories are often not the same as their theories

² Massey University Human Ethics Committee: Southern A Application - 09/26

³ But none of the participants actually made use of this right.

in use... then having them fill in questionnaires is not likely to uncover the real culture” (p. 15).

Thus the survey responses are not taken at face value to constitute “the organisational culture”, but as root themes of espoused cultural values and as a first step toward deciphering the organisational culture. It is based on the assumption that certain basic features of organisational cultures are likely to be generalisable across organisational settings. In other words, this initial step follows an *etic* approach to culture.

It is important to note that by using this quantitative survey instrument of culture, I am not looking for statistical co-relationships between independent and dependent variables, nor am I trying to make inferences to a larger population beyond the actual case. It supplies background data and thus an orientation for the following stages of the research design and helps validate and interpret findings that emerge through other methods (cp. Miles & Huberman, 1994, p. 41).

The questions are based on the GLOBE study (House, et al., 2004), the most recent large-scale cross-cultural research project. The answers to the questions are subsequently condensed into a total of eight cultural dimensions⁴. The unique scores of a work group in these cultural dimensions should be viewed as a first step toward a “broadly grounded ‘roadmap’” (M. E. Phillips & Boyacigiller, 2003) to the group’s culture and can help gain an overall appreciation of the group’s values and thus facilitate the subsequent stages of analysis. How “dimensions of culture” should be understood in the context of the present research is discussed in Appendix A.

5.2.2.1 Selection of the cultural framework

I chose the GLOBE framework of standardised, universally applicable set of bipolar cultural dimensions (House, et al., 2004) to develop a tentative understanding of the

⁴ Whereas the 9th dimension of the GLOBE framework, “Gender Egalitarianism” may be relevant for the original purpose of the GLOBE project, it was found during the pilot case study to be of very limited relevance for the purposes of the present study. The items constituting this dimension were therefore dropped for the sake of brevity of the research instrument.

organisational culture. What makes the GLOBE scales particularly relevant for the present study is the fact that it comprised cultural dimensions for both the societal and an organisational frame of reference, thus facilitating a contextualised perspective on the organisational culture and cross-level cultural comparisons (Rousseau, 1990).

- The GLOBE project can be seen as an update and extension to Hofstede's (1980a) seminal work. While the data of Hofstede's dimensions dates back to the late 1960s and early 1970s (Hofstede, 2006), the data underlying the GLOBE project was gathered much more recently, during the late 1990s. It can be argued that the conceptual "overlaps between the GLOBE dimensions and the Hofstede's dimensions are quite substantial" (Leung & Ang, 2009, p. 24).
- However, the GLOBE "as is"⁵ dimensions of culture constitute a so-called "referent shift" model of culture (Fischer, 2009). They were designed to capture the subjective *perceptions of the group's values* and norms by directly asking respondents to evaluate culture at the group level. Hence it is different from Hofstede's (1980a, 2001) "summary index" model of culture (Fischer, 2009), whose dimensions are based on individuals' self-reports regarding their own attributes or attitudes that are aggregated to the group (national) level in

⁵ The GLOBE project produced two different sets of scales and corresponding dimension: "as is" questions and others with the wording of "should be". Although the "should be" dimensions were labelled cultural "values" by the GLOBE team (House, et al., 2004), other cross-cultural researcher take the "as is" dimensions to signify cultural values (Erez, 2009). Hofstede (2006) himself asserts, "GLOBE's 'as is' measure corresponded with what I called a shared value" (p. 887), referring to his own influential framework of national culture (Hofstede, 1980a). Likewise, Smith et al. (2006) find strong, significant correlations between the GLOBE "as is" scores for power distance and collectivism with Hofstede's dimensions of the same names. In pilot tests the wordings of the "as is" as opposed to the "should be" scales were usually quickly and correctly understood by the participants, due to the lower level of abstraction needed. This is in line with the recommendations of Harzapaz, (2004) who cautions against the use of hypothetical questions. Therefore I made only use of the scores and questionnaire items of the "as is" dimensions. It is important to note that any mention of GLOBE dimensions in the following refers to the "as is" and not "should be" dimensions.

what Hofstede calls an “ecological” analysis (Hofstede, 1983). For the purpose of this study, which is to capture the espoused cultural values of the group, the GLOBE model is more suitable.

- The GLOBE project is one of the most comprehensive cross-cultural studies in terms of participating countries after Hofstede’s (1980a) seminal work. Boyacigiller and colleagues (2004) remark that “the sheer number of countries included in the project and its etic and emic focus, with qualitative reports written on many of the countries studied, suggests that the GLOBE project is going to have a lasting effect on the field” (*p. 109*).
- It provides a comprehensive set of a total of nine cultural dimensions which covers a wide range of aspects on both the organisational and societal cultural level and thus conceptually extends the set of Hofstede’s four original dimensions, which makes it particularly suitable for an explorative approach such as in the present study. The dimensions are explained in Appendix B.
- Another highly relevant feature of the GLOBE framework for this project is that it differentiates between “In-Group” and “Institutional” type collectivism. As will be shown in the following, this differentiation is highly relevant for understanding the differences between the societal cultures that were chosen for this project.
- The nine GLOBE dimensions of culture are matched for the organisational and societal level, with organisational respectively societal referents in the otherwise largely identical Likert measurement scales. This provides a straightforward way to juxtapose the espoused values of the organisational culture to the surrounding societal culture, as will be demonstrated in the following Section Data Analysis.
- It provides most recent data of societal level culture for a wide range of countries/societies and local translations of the questionnaire instrument. The importance of native-language instruments has been shown repeatedly

through research (for instance, Harzing, 2006). Through the use in the GLOBE study itself, the measurement instruments have been applied in many local languages as well as extensively pretested in sampling, data collection and analysis. Moreover, the use in recent studies (e.g. Kennedy, 2008) underscores the relevance of the GLOBE cultural scores.

- The scales are theory-driven, have been inter-culturally validated and rigorously tested for equivalence and comparability and have been shown to exhibit satisfactory psychometric properties (Hanges & Dickson, 2004, 2006). Thus equivalence of measurement issues, which have plagued much of the past cross-cultural survey research and are hardly being seriously dealt with in the field of OM/QM research have been dealt with adequately. The English scales and syntaxes have been made publicly available (GLOBE, 2010a, 2010b). Local translations of the instrument can be solicited from the researchers that administered the instrument in the respective countries⁶.
- Although the GLOBE scores are based on data from selected industries (financial services, food processing and telecommunications), O'Connell and colleagues (2008) could not find significant differences in the mean scores across these distinct industries so that the scores are likely to be able to be extrapolated to other industries. In contrast, Hofstede's (1980a, 2001) widely used framework is based on data from only one multinational organisation.
- The questionnaire items mostly employ a plain, clear language and uses straight-forward 7-point Likert scales for all items, which makes them comprehensible for respondents from different educational backgrounds.

⁶ I would like to express my gratitude to Professor José M. Prieto of Complutense University, Madrid, Spain, for his help.

5.2.2.2 Questionnaire design

The questionnaire was validated by an academic expert⁷ in the design of questionnaires (Gendall, personal communication in May 2009). Following his recommendations, the questions using “fully disagree ... fully agree” were grouped together on the questionnaire to make answering the questionnaire easier. The final questionnaire is shown in Appendix C.

5.2.2.3 Practices of CI

Questions probing organisational practices are based on previous research, most notably on the scales of “infrastructure practices” as designed by Flynn, Schroeder and Sakakibara (1995) and shown by Naor, Goldstein, Linderman and Schroeder (2008) to have particular cultural relevance. They span a wide range of different aspects relevant to CI and are therefore particularly well suited to gain a tentative understanding of the work practices within the group.

5.2.2.4 Administering the survey

The questionnaire was distributed at the outset of the each case study amongst all group members that agreed to participate in the study under the conditions explained in the consent form. In some cases, the administration of the survey was done in parallel with the distribution of information sheets and consent forms to participate in the study, while in others the consent form preceded the survey, depending on practical considerations. The question wording is adapted to the respective case study, e.g. the “Toyota Warehouse Palmerston North”.

The survey was administered anonymously to reduce the respondents’ potential fears of being identified and “held responsible” for critical positions. This was a measure to obtain more frank and valid responses. Referring to the recommendations of Miles and Huberman (1994) this also helps avoid an “elite bias” during fieldwork by

⁷ I would like to express my gratitude to Professor Phil Gendall from Massey University, New Zealand for his recommendations.

including information from respondents that would otherwise remain “silent”, particularly those who are not prepared to participate in a one-to-one interview or a group workshop, but are happy to fill in a questionnaire.

The researcher personally distributed the instrument, gave the instructions for filling in the questionnaires and was present to answer any questions by the participants. In addition to the written instructions, participants were assured that the filled-in questionnaire would only be read by the researcher and no information about the respondents’ identities would be given to the organisation. Participants were encouraged to raise questions to the (present) researcher if they have doubts and/or add qualifying comments to their answers as they consider appropriate. They were advised to leave any question blank that they consider meaningless or inadequate in the work group or that they do not fully understand.

Summing up, the survey was administered at the outset of each case study and is designed to understand the group’s espoused cultural values by means of an *a priori* application of the categories of a theoretically derived and conceptionally well founded cultural framework. The final questionnaire is shown in Appendix C in English and Spanish. It provided a broad yet tentative understanding of the group’s espoused values. With regard to cultural studies in QM, Sinclair and Collins stated, “while attitude surveys may help in getting initial information, this should be viewed in the light of more ethnographic and phenomenological based studies” (p. 27). This leads over to the next stage of the methodological sequence.

5.2.3 Field observations and on-the-job discussions

If we accept that multiple levels of cultures are present simultaneously, interact in complex ways and are closely linked to the effectiveness of CI in organisations, then answers from a survey can only be the starting point of a cultural analysis.

In fact, there is a broad consensus amongst scholars from such diverse disciplines as psychology and OS that the core of culture is unconscious and below awareness. By implication, if we expect to reveal the “real culture” of a group through having one or

several group members fill in questionnaires, then we are perhaps asking them “to report more than they are really able to” (Rousseau, 1990, p. 163).

In addition to understanding the work practices of the group, another essential feature of the observational sessions is to observe social processes as they unfold. For this purpose, organisational ethnographic methods have probably the highest potential but are extremely time-consuming. Due to limited resources on part of both the researcher and the participating organisations, they were not an option for the present study. Like other studies before it, this study employed the quasi-ethnographic techniques common to the “multiple culture perspective” (Sackmann & Phillips, 2002, 2004) of direct and participant observation, often linked to spontaneous on-the-job discussions with employees.

During the observational sessions, attention to the rich contextual background of the case studies was vital and required sensitivity toward a multitude of different aspects through the researcher (Neyer & Harzing, 2008). Therefore reflexivity on the part of the researcher is an essential aspect of this approach and will be discussed in the last chapter of this thesis.

The participant and direct observations took place during multiple sessions on different occasions. They involved daily operations on the shop floor, but also attendance at team briefings, the discussion of suggested improvements etc. When the opportunity arose the fieldwork also involved work-shadowing during training and induction procedures. Observational sessions also provided an opportunity to interact with the organisational members, establish trust through casual conversations and to identify potential interviewees who are communicative and amply reflective with regard to the organisation and its culture.

The conditions under which these informal conversations and on-the-job discussions were conducted were often unsuitable for audio recording owing to background noise. Also, the openness on the part of the organisational members and therefore the authenticity and value of the data obtained through this fieldwork was - at least in part - a result of the spontaneity of the situations. Therefore asking for permission to

record the talk would have interrupted the natural flow of the conversation as the use of audio recording equipment discomfited some people.

As opposed to these spontaneous but largely unstructured on-the-job discussions, the interviews provided a much more systematic source of data, as will be shown in the following section.

5.2.4 One-on-one interviews

The interview stage shifted the focus from espoused cultural values of the group (as tapped through the survey) to *individual* perceptions and interpretations of CI within the group. As opposed to functionalist studies, normal group members were thus not interviewed in the role of an organisational *informant*, but one of a *respondent*. The organisational culture is understood as lived reality of the organisational members. The interviewer's task is to trigger the respondent to reflect upon this lived reality and comprehend the underlying connections of these experiences, however trivial the reflections may seem to the respondent.

It was important to select a well-balanced cross-section of employees for the interviews in terms of hierarchical position, gender, age, ethnicity and employment status and tenure, in order to achieve an adequate diversity of views. Individuals from all ranks within the workgroup were interviewed, including skilled trade workers, team leaders, and managers. Recently hired employees or people who had spent significant time in other organisations served as "boundary spanners" (Louis, 1985) and gave insights that often remain barred to longstanding employees due to the tacit nature of culture.

Some key interviewees were re-interviewed at greater length and in some cases several times "because of their experience, lucidity, and willingness to talk openly with the researcher" (Martin, 2002, p. 220). When applicable, both managers and union officials were interviewed, too. If consent was given by the interviewee, the interviews are taped and transcribed verbatim.

Each full interview consisted of two parts⁸: The first part served the purpose of learning more about the interviewee's internalised values (Triandis, 1989) through the application of the Twenty Statements Test (TST). This highly structured part of the interview was followed by an open-ended and semi-structured second part. The objectives of this part were twofold: firstly to get an appreciation of the individual's meanings of CI; and secondly, to extract cultural themes for the subsequent group workshop that will help gain an insider's understanding of the organisational culture. In the following I will describe these two parts in more detail.

5.2.4.1 First part: Twenty Statements Test

The social self-concept is regarded as one of the defining aspects of the individualism-collectivism construct (Triandis, 1995) and considered to have profound cognitive, emotional and motivational implications (Markus & Kitayama, 1991). A person's self-concept can be understood as the "mental representation of his/her own personality" (Somech, 2000, p. 162) or to reflect the cultural values as they are represented in a person's self.

A recent study showed how personal characteristics interact with organisational cultural values (Miron, Erez, & Naveh, 2004) to achieve high performance in quality and innovation. Similarly, Hatstrup, Ghorpade and Lackritz (2007) showed that higher levels of individual work group collectivism are associated with higher centrality of work, an important determinant of organisational commitment to the work role, job involvement and satisfaction.

⁸ It should be noted that not all interviews were conducted as full interviews including the first, TST part. During the pilot case study it was found that particularly interviewees in higher positions and educational levels such as managers tended to be reluctant to participate in the TST and would question the purpose of the test and thus distort the results. Whether or not the TST was to be conducted was a judgement call of the researcher and was decided for each interviewee separately.

The TST is a simple method that is regularly used to assess the individual self-concept. Individualistic values are represented in the independent⁹ self, while collectivist values are represented in the interdependent self (Erez & Gati, 2004).

In the TST, the interviewee is asked to describe herself spontaneously using up to twenty statements starting with “I am”. This procedure goes back to the work of Kuhn and McPartland (1954) and has been extensively applied in cross-cultural research (Triandis, 1989). The TST is arguably more suitable to capture personal variability of the self than structured, predefined instruments.

The purpose of applying the TST in the present study was twofold: firstly, to examine the link between the individual’s social self-concept and the meaning the individual ascribed to practices and concepts of CI. The second purpose refers to the composition of the group; the self-concept was a measure of the degree of cultural homogeneity within the group.

In relation to the duality of culture (see Section 4.2 “Ontology”) the TST refers to culture as deeply internalised values. In this sense the TST was used to get a tentative understanding of the cultural values of organisational members in order to develop an appreciation of the cultural complexity in the group. The TST is used as part of a bottom-up approach to decipher the group’s culture, i.e. starting from the self-concept of individuals toward culture as a shared meaning system.

In the present study the TST was used in its non-contextualised (Cousins, 1989) and oral form¹⁰. To the best of my knowledge a research design involving the TST has not been used in previous studies that investigated CI in organisations through field-based data collection. Other studies used a written form of the TST in which instructions to the TST are written at the top of the answer sheet in which the

⁹ The terms used by different authors vary widely; for list of equivalence please see Table 9.

¹⁰ Appendix I discusses the validity of the TST in its oral form.

participants are asked to write the twenty statements in twenty blanks on the sheet provided. Cousins (1989), for instance, used the following wording:

In the twenty blanks below please make twenty different statements in response to the simple question (addressed to yourself), "Who am I?" Answer as if you are giving the answers to yourself, not to somebody else. Write your answers in the order they occur to you. Don't worry about logic or importance. Go along fairly fast. (p. 126)¹¹.

This study used an oral version of the TST, in which almost identical instructions¹² are read to the participants at the outset of the interview. Triandis (1989) cautions that sampling of the self may vary in relation to the environment and situational factors such as the condition of anonymity. Similarly, Brewer and Gardner (1996) show that the test results could be influenced by psychological priming, which induces the participants to think about certain groups. To avoid unintentional priming, it is highly important that the physical environment and other conditions during the test are kept constant across the different interviews and cases. As part of this rationale, the TST is conducted at the beginning of the interview after a brief introduction – rather than at the end of the interview, since the interview content and the course of conversation during the interview might constitute a bias for a subsequent TST. Identical wording for the instructions is used to ensure consistent conditions for all interviewees and minimise procedural variances. All statements given by the interviewees should be understood as idiosyncratic for the interviewees, and the researcher must refrain from making value judgement of any kind during the interview.

At the outset of the test participants were informed about of the general purposes of the test, ("I would like to understand the organisation through the eyes of the employees and therefore would therefore like to learn more about yourself").

¹¹ Other studies have employed the TST on the departmental or organisational level, using prompt statements such as "This organization is..." (Mackenzie Davey & Symon, 2001), with mixed results.

¹² The instructions have been adapted to the interview situation, see Appendix D.

However, interviewees were left naïve with regard to the exact criteria that are used to analyse their answers in order not to distort the answers.

I assisted the interviewee by noting down the answers visible to the interviewee on a prepared sheet that displays twenty sentence beginnings of “I am”, followed by blanks. Pilot tests had shown that this procedure reduces distractions to the interviewee.

5.2.4.2 Second part: In-depth interview

While a precise replication of the wording in the first part of the interview is highly desirable, this is not the case in the second part of the interview. The aim is to elicit spontaneous reflections and insights from the interviewees about the organisational culture. The workgroup’s culture is understood as the frame of reference through which group members perceive their world in relation to CI. With cultural features being largely below awareness, the objective of the in-depth, face-to-face, semi-structured interview is to help the interviewee surface subconscious cultural assumptions through a meaningful dialogue.

While an interview prompt that reflects the partial pre-planning of opening questions is used, the goal is not the exact replication of previous interviews but to establish a casual conversation mode between the interviewee and interviewer. I had to take the position of a reflexive, participative enquirer who seeks to understand a constructed reality of the organisational member. I needed to step outside my own narrow cultural background, try to see CI through the eyes of the organisational member and comprehend the organisation from the perspective of the other who lives by a meaning system different from my own.

At the outset of this part of the interview, I used incipient questions to “break the ice” and to de-contextualise the participants from the first interview part, so that any data obtained in the second part is not “contaminated” by cognitive remnants of the self-reflection in the first part of the interview.

The opening questions of the interview prompt (shown in Appendix D) are based on previous research (most notably, Harris, Harvey, & Huddart, 2005) as well as experiences from the pilot case study. Typical questions to the interviewees involved, “how they came to work there, why they stayed, what had worked well, why it worked well, what didn’t they like about the place, where was it heading, what was the special magic that made it different” (Harris, et al., 2005, p. 73). The key themes underlying the actual questions are: How do organisational members make sense of CI practices and concepts? What does it mean to be a member of the group?

These broad questions are not designed to inquire into specific organisational facts, but to trigger off reflections about the organisation’s culture on the part of the interviewee. The purpose is to learn about the cultural meanings that provide guidance to the individual in the given situation. As Marshall (1990) stated, “good data are obtained by getting inside the world of others. The only truths are the emic realities of insiders” (p. 192). As Harris et al. (2005) wrote, otherwise “people will give us what they think we want to hear and the more content we put into our questions the more we pre-determine the answers” (p. 72).

Thus my task as interviewer was to use these opening questions to lead naturally into an open conversation and only guide through the interview. It was essential to listen to the member’s reflection upon CI and organisational membership through long meaningful conversations rather than an “extraction” of factual knowledge.

Results from the previously conducted survey (see Section “Survey”) and organisational observations (see previous Section “Field observations and on-the-job discussions”) sometimes provided additional stimuli for the interviews. Thus issues could be raised in an open-ended manner, allowing interviewees to choose and cover the topics to the extent they considered adequate.

It was important for me to be sensitive toward the interviewees’ need to express themselves and not to impose my own ideas on them. This eliminated the need for leading questions, which would have otherwise imposed my own preconceived conceptions upon the interviewee and thus distort the results (Spradley, 1980).

Similarly, it was important for me to refrain from using CI jargon because this tends to largely predetermine the interviewee's responses (Harris, et al., 2005).

If the opportunity arose, interviewees were asked to "walk me through" a typical event. In other cases I provided additional help by asking interviewees to compare the group's culture with the one of a previous employer, as some people found it apparently easier to make comparative reflections.

The interviews lasted typically around one hour with some going as long as four hours, in that case in multiple sessions due to time restrictions. They were recorded using a digital audio recorder and transcribed verbatim, i.e. using interviewee's actual words. Once transcribed, the transcripts were fed back to the interviewees to check for accuracy in order to increase the validity of the findings.

In conclusion, the aim of the second part of the interview was discover what meanings group members attribute to concepts and practices of CI and their membership in the group. It was important to treat the interview as a casual conversation in order to obtain spontaneous statements and insights. The interview prompt gave a structure to the interviews, but still allowed the content of the interviews to dynamically evolve from the interviewees' perspective. With regard to the overall research design, the interviews were also used to extract cultural categories for the subsequent workshop.

5.2.5 Group workshop

The group workshop concluded the fieldwork as the last step in the sequence of methodological stages and was designed to bridge the gap between individual and shared meanings.

5.2.5.1 Aim

Although individual interviews can give valuable insights regarding the individual ascription of meanings and the mechanisms and conditions under which this occurs, ultimately culture is a group phenomenon and thus requires probing at group level. Smircich (1983c) argued:

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An analysis of an organization as a culture must go beyond any single individual's understanding of the situation, however, it must be concerned with the knowledge of the whole, and the multiple meaning systems or "counterrealities" that may be in competition with one another. (p. 162)

Culture is understood as the superordinate "collective reality" and more than the sum of individual subjective realities. Thus the purpose of the group workshop is to access and unlock the meanings in relation to CI held at the group-level. More specifically, the aim is to prompt an active reflection of the importance of CI for the group and to surface the social processes associated with it.

The group workshop makes social interaction and group communication part of the method. It used the previously extracted cultural themes from the interviews with the objective of "jointly exploring and analyzing with insiders the anomalies or puzzling features observed or uncovered in interviews" (Schein, 1984, p. 13). The procedure draws on the group discussion technique suggested by Schein (1985, 1991) and has parallels with the group thematic analysis technique of the affinity diagram (Mizuno, 1988), which uses written statements as stimuli for participants.

5.2.5.2 Procedure

In order to prepare the group workshop, interview records and transcriptions as well as the observation notes were scanned to generate a list of preliminary cultural themes. A selection of these cultural themes was noted on cards in preparation of the workshop¹³. The purpose is to ground the workshop in specific cultural themes that are actually relevant in the respective group. Therefore the list of themes was unique for each case; however, usually there was a common set of themes between cases, which facilitated subsequent cross-case analysis.

¹³ In addition, blank cards were provided in case additional cultural themes emerged or were deemed essential by the group; however, this situation did not arise in any of the workshops.

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The wording of the cultural themes reflected “local” language and expressions that are used in the group. In addition to previously extracted cultural themes that I deemed rather typical of the group’s culture I added several cards with provocative statements to stimulate an open discussion. I found that having tangible cards to work with helped participants considerably to loosen up through a “hands-on” experience. These cards furnished them with a clear depiction of each theme and enabled them to make coherent comparisons.

The workshop participants were a subset of the respective work group, with the ideal group size between five and seven participants. Suitable participants were typically identified in the preceding interviews and on-the-job discussions. In terms of group composition I sought a mix between group members I am familiar with and others that I have not yet extensively worked with during fieldwork. This ensures a sufficient diversity of ideas and group dynamic while also allowing those group members that had not yet had the possibility to participate actively to voice their views.

Ideal participants are open-minded, reflexive and perhaps also critical. From the pilot case study it was clear that the group composition in terms of power differentials, personality types, openness and relationships were paramount for the resulting group dynamics and the diversity and richness of the workshop outcomes. It was important to strike a balance between more restrained participants and those who would hinder an open discussion through their own dominance or talkativeness in the discussion.

The actual workshop consisted of two similar stages. In the first stage, participants were invited one-by-one to read a card of their choice aloud and place it on a whiteboard according to how *typical* she thought the cultural theme was for the organisation on the horizontal axis (see Figure 12). In a subsequent second stage, participants were asked to arrange the same cards according to how *beneficial* they were deemed for CI on the vertical axis, while maintaining the horizontal position of the cards.

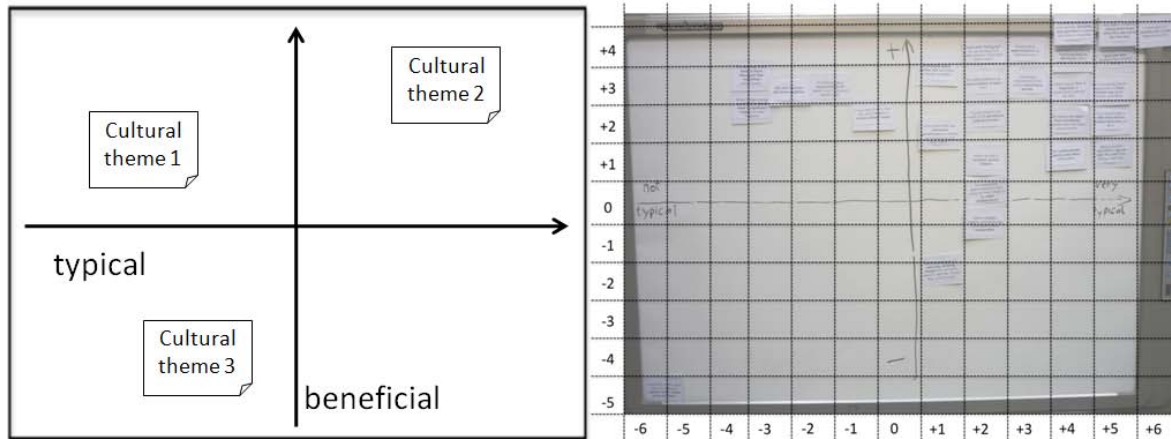


Figure 12: Graphical representation of cultural themes: concept (left) and realisation at a workshop (right, with superimposed equidistant measurement grid)

Participants were encouraged to give specific examples or share other relevant thoughts with the group while arranging the cards. In both stages, once all cards had been placed on the board, the group was given some time and the opportunity to re-arrange the cards in order to account for different opinions – under the condition they share their thoughts with the rest of the group when they re-arranged the position of a card. At the end of each stage, I took a photo of the resulting two-dimensional arrangement of cultural themes to track changes and capture the dynamics of the discussion within the group (see Table 8). The (changes in) locations of the cards were as important as the discussion process and the group dynamics that lead to them.

The two major data outputs from the group workshop were:

- A tangible, graphical representation of cultural themes of the organisation in terms of the perceived degree of *typicalness* and *benefit* for CI (see Figure 12).
- The audio recording that captures the discussions and socio-cultural dynamics that develop within the group.

Table 8: Photos taken during workshop

| | Criterion | Stage |
|----------------|------------------|--------------------|
| Photo 1 | Typicalness | Initial |
| Photo 2 | Typicalness | After re-arranging |
| Photo 3 | benefit for CI | Initial |
| Photo 4 | benefit for CI | After re-arranging |

Practical considerations for the preparation of a workshop included the use of cultural themes that are potentially less typical or even atypical in order to trigger and active discussion and make sure not all cultural themes are clustered at the “very typical” end of the scale. The overall duration of the workshops was between one hour and 90 minutes.

I acted as a facilitator and observer with the aim to stimulate an active and open discussion of the organisational culture. I steered the workshop when the discussions got out of hand but at the same time allowed group dynamics to develop.

In summary, the aim of the workshop was to make tacit shared meanings and the social processes of the group explicit. For that purpose, previously extracted cultural themes were used as an organising framework for the group workshop. The group discussion is best understood as a guided reflection of the work group participants that helped ground and validate these cultural themes and probe their importance for CI in the group.

5.2.6 Complementary document analysis

When available, company documentation was used to supplement the data of the fieldwork. Relevant documents ranged from slogans posted in the workplace over operations manuals up to periodical publications of performance data. The documentation was primarily used to better understand how the organisation attempts to instil meaning in CI work practices, thus providing the context for

understanding the meaning-making of the group members. The following section describes how the data obtained through the different methods was analysed.

5.3 Data Reduction Strategies

An initial analysis was performed in parallel with the fieldwork because the sequence of methods was designed in a way that the results from each step informed the data gathering in the subsequent step. The completion of the fieldwork was followed by the in-depth analysis of data from different sources, which is described in this section: The first subsection is concerned with the analysis of survey data, the second with the analysis of the data from TST and the third with schematic analysis of the qualitative data from the in-depth interviews and on-the-job discussions. The fourth subsection describes how the rich verbal and numerical data from the group workshops were analysed. The fifth and sixth are concerned with the analysis from organisational observations and secondary data, respectively.

5.3.1 Analysis of survey data

The survey serves as the entry point to the group-level analysis, which follows Rousseau's (1990) suggestion to combine standardised data collection methods of culture not with purely statistical analytical methods, but with more interpretive techniques. Similarly, cross-cultural psychologists Smith, Bond and Kagitcibasi (2006, p. 29) argue that "a better study will show evidence of input from both emic and etic perspectives" (p. 29).

The analysis is based on data from a broad range of group members in three basic categories: demographic descriptors, cultural values and norms of the group as well as CI practices.

5.3.1.1 Demographic descriptors

Several personal details were asked in the questionnaire, including age, gender, educational background, job tenure and work role. These descriptors allowed conclusions concerning the group composition and potential sub-cultural demarcation lines within the group.

When respondents chose to give full information on these demographic descriptors, they could often be easily and unequivocally matched with actual work group members during fieldwork owing to the small group size. While thus the questionnaire provided complementary information that would contribute to a more holistic understanding of the cases, it was the researcher's responsibility to use these additional insights with care and preserve the anonymity of respondents under all circumstances.

5.3.1.2 Cultural values and norms

The individual survey answers were combined according to the empirically derived factor groupings of the GLOBE dimensions of organisational culture using the syntax provided with the scales (GLOBE, 2006). In the present study, these dimensions are taken to represent the group's espoused values. They are explained in Appendix B.

Oyserman et al. (2002) explained "values can be studied at the individual level like other cognitive concepts, but are also amenable to social- or group-level analyses, in terms of the norms, priorities and guidelines set up by societies, cultures, and other social groupings" (p. 114).

The resultant scores on the GLOBE dimensions of organisational culture indicated how the organisational culture differs in significant ways from the surrounding societal culture as illustrated in Figure 13, using the findings from one case as an example. By treating the espoused values in an organisational culture as something that is implicitly quantifiable, it was possible to draw a link to the surrounding societal culture and the "dimension paradigm", which has become normal science (T. S. Kuhn, 1996) in cross-cultural studies (Hofstede, 2006).

Thus the societal scores of culture (House, et al., 2004) were used to provide the context for interpreting organisational cultural dimensions. These societal dimensions characterised the societal culture in which the case organisations are embedded, as well as the social environment in which most organisational members had grown up.

Thus they did not represent individual traits or values, but the context in which personalities and values of individuals were shaped.

Furthermore, the organisational scores enabled a tentative inter-organisational comparison and facilitated the identification of idiosyncrasies or contradictions within a workgroup. The relevance of values as group norms for a specific group differed – the variability in the group members’ responses gave an indication for that.

While in the example in Figure 13 the cultural dimensions of Assertiveness, In-Group Collectivism, Performance Orientation, Future Orientation, and Uncertainty Avoidance showed a very similar score for both organisational and the surrounding societal level, the organisation scored remarkably higher on the dimensions of In-Group Collectivism and lower on Power Distance (see red dashed squares for highlighting in Figure 13). In the given example the findings were also used to direct the interviews toward the importance of the perception of the hierarchy and group cohesiveness. Put another way, the espoused values as expressed in the survey were used as a point of departure toward deciphering the deeper levels of the group’s culture, in line with Schein’s (2010) suggestion.

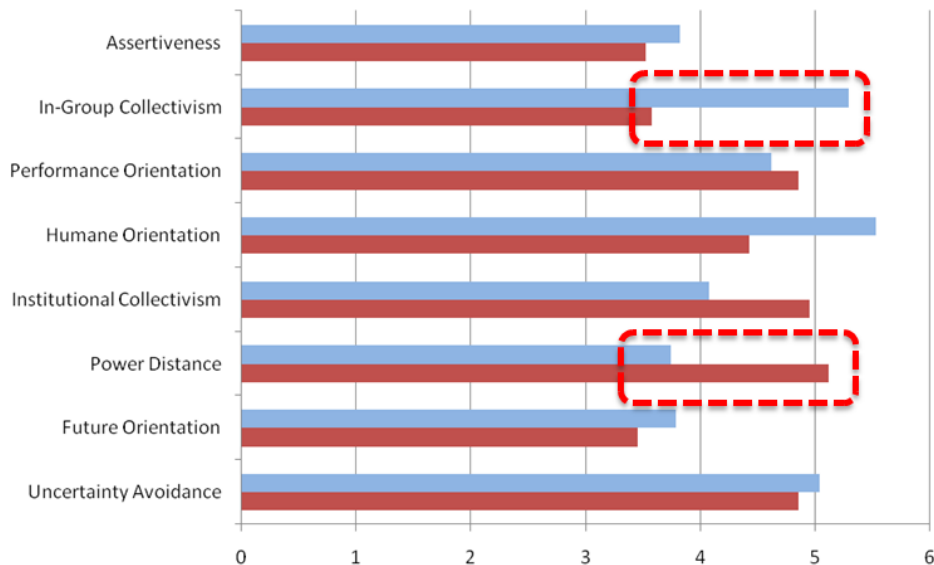


Figure 13: Juxtaposition of organisational (top, blue) and societal culture scores (bottom, red)

Summing up, following the example of Craig and Lemon (2008), the “Likert survey framework is not looking for statistical co-relationships, [but] it is used as a tool for establishing the comparative socio-cultural group patterning in and between organizations” (p. 198). It is important to note that despite the relatively substantial set of individual responses that were gathered across all case studies, no attempts were made to conduct individual-level analyses to statistically map relationships between the cultural scores and CI practices. This is because in each case, all questionnaire responses were perceptions of the same work group. Therefore individual responses cannot be assumed to be (statistically) independent. The actual number of independent answers would be equal to the number of cases ($n=4$), which renders the answers clearly insufficient for analysis.

5.3.1.3 Determining cultural boundaries

While past research only seldom investigated the level of agreement amongst members of a cultural group, the conceptualisation of culture as a shared meaning system immediately suggests the examination of consensus within the group (Fischer, 2009).

Although the relatively small size of the group reduced the likelihood of subcultures, this study did not make the a priori assumption of within-case cultural homogeneity. Thus the initial focus on the work group was tentative. After conducting the survey and several interviews it was possible to draw more clearly defined cultural boundaries. Since most respondents provide complementary demographic information together with their espoused cultural values in the questionnaire, potential subgroups according to age, job tenure, hierarchical or educational levels could be analysed in terms of within-subgroup homogeneity and between-subgroup variability.

Louis (1985) explains in this connection:

Psychological penetration refers to the consistency or homogeneity in interpretation of shared meanings among individuals in the group whose culture has been isolated. Is there significant variation among group members' translations

of shared meanings? Around what issues is there most (or least) variance in interpretation? Through questions like these, the homogeneity of a culture can be empirically investigated. (p. 80)¹⁴

For this purpose basic statistical techniques that measure variability were used to analyse the degree to which the espoused cultural values were shared. Looking specifically at the most shared values (i.e. with a minimal variability in responses to the items such as range and standard deviation) helped discern subcultural demarcation lines in each work group.

5.3.2 Extracting individual self-concepts from the Twenty Statements Test data

5.3.2.1 The self-concept

The theoretical construct underlying the individualism-collectivism (I-C) construct is complex and has perhaps lacked conceptual clarity in some past research (Oyserman, Coon, et al., 2002). One way of approaching this “fundamental dimension of cultural variation” (Brewer & Chen, 2007, p. 133) in accordance with the conceptualisation of culture underlying this study is through reference to the social self-concept.

While I-C is a cultural construct, the self-concept is an individual-level psychological attribute; the distinction being whether the attribute is viewed as residing within person or a culture. The self-concept plays an important role for an individual’s evaluation of self-worth (Brewer & Gardner, 1996; Erez, 2009) and thus can be viewed as the individual’s frame of reference for the subjective experience and social motivation. A similar idea was brought forward by Sackmann and Phillips (2003) who argue that the fit of culture and organizational practices will increase the “mindset-wellbeing” (p. 45).

Numerous studies in social and cross-cultural psychology have shown that the self-concept is an important determinant of individuals’ social behaviour (Markus &

¹⁴ Note that Louis refers to her conceptualisation of culture in this excerpt.

Kitayama, 1991) addition to situational factors with implications for communication, negotiation and inter-group relations (Brewer & Chen, 2007, pp. 145-147).

The purpose of the TST in this study is to better understand the extent to which participants view themselves in terms of their relationships to others. While it can help locate individuals tentatively in an essential aspect of culture, it is important to note, that it is not a comprehensive psychological test.

5.3.2.2 Categories

Whereas scholars previously distinguished only between two polar types of selves (independent and interdependent selves), Brewer and Chen (2007) recently proposed a discrimination of three different selves into the *personal*¹⁵, *relational* and *collective* self-construal. According to Triandis and Wasti (2008), this “trichotomization” helps “resolving many of the conceptual issues that had plagued the I-C dimension of culture” (p. 6). *Relational* and *collective* selves were previously conceptually aggregated to the *interdependent* self, e.g. by Markus and Kitayama (1991). Table 9 explains the equivalence of different widely used terms across different established publications.

Table 9: Equivalence of terms used by different authors to describe social self

| Publication | “Individualistic” self-construal | “Collectivistic” self-construal | |
|----------------------------|----------------------------------|---------------------------------|------------|
| Markus and Kitayama (1991) | Independent | Interdependent | |
| Triandis (1995) | Idiocentric | allocentric | |
| Brewer and Chen (2007) | individual | relational | collective |
| Brewer and Gardner (1996) | Personal | relational | collective |
| The present study | Personal | relational | collective |

Brewer and Chen (2007) explained that:

¹⁵ They use the term “individual” self instead of the term “personal” self, which is used here.

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Corresponding to the different levels of self-construal... this refers to shared understandings about whether the self is best represented as a separate, unique individual (individual self-construal), or as a node in a tightly connected network of interpersonal relationships (relational self-construal), or as an interchangeable part of a larger social entity (collective self-construal). (p. 139)

When describing oneself, such as in the TST, a person with a strong *personal* self-construal focuses on own attributes (e.g. "I am ambitious"), while people with a relational or collective self tend to use attributes that link themselves to other people. Whereas the *relational* self is concerned with personalised, close relationships to others such as immediate family and friends (e.g. "I am a father."), the *collective* self refers to a depersonalised membership in a symbolic group or category (e.g. "I am a New Zealander."), which usually does not require personal ties, such as affiliation to a nationality (Brewer & Chen, 2007).

The distinction between different self-construal is about whether an individual views herself as an autonomous and separated entity from others as opposed to interconnected and embedded into a network or part of a larger group.

Put another way, the personal self-construal represents an individual's view of what makes him or her unique. In contrast, both relational and collective selves seek to fulfil the role defined by a reference group. While the relational self-construal refers to the self-definition in terms of *personalised* role relationships and connections with significant others, the collective self is "defined in terms of prototypical properties that are shared among members of a common ingroup" (Brewer & Chen, 2007, p. 137). These "collective identities do not require interpersonal knowledge or interaction but rely on shared symbols and cognitive representations of the group as a unit independent of personal relationships within the group" (p. 137). It is important to note that most people exhibit all three types of cultural selves. What differs is the degree to which the different selves are salient. A detailed summary of features of the three different self-construals including identity, loci of agency and motivational concerns is displayed in Table 10.

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Table 10: Features of different self-construals (lower part adapted from Brewer & Chen, 2007, p. 141)

| Feature | Personal | Relational | Collective |
|-------------------------|---|--|--|
| Nature of relationships | Self is viewed as separate and autonomous from others | <p>“personalized, incorporating dyadic relationships between the self and particular close others and the networks of interpersonal connections via the extension of these dyadic relationships” (Brewer & Chen, 2007, p. 137), “role relationship with significant others” (Brewer & Gardner, 1996, p. 84).</p> <p>“network of interpersonal connections” (Brewer & Yuki, 2007, p. 310)</p> <p>“close personal relationships, small-group interpersonal networks” (Brewer & Yuki, 2007, p. 311)</p> <p><i>Relationship-based</i> ingroups</p> | <p>“involves depersonalized relationships with others by virtue of common membership in a symbolic group” (Brewer & Chen, 2007, p. 137).</p> <p>“defined in terms of prototypical properties shared among members of a common ingroup” (Brewer & Yuki, 2007, p. 310)</p> <p>“do not require interpersonal knowledge or coordination” (Brewer & Yuki, 2007, p. 310)</p> <p>Depersonalised social category or group (Collectives or large social groups)</p> <p>“large, symbolic groups” (Brewer & Yuki, 2007, p. 311)</p> <p><i>Category-based</i> ingroups</p> |
| Perspective on self | Unique, separate individual | Node in a network of interpersonal relationships | Interchangeable part of a larger depersonalised social entity. |
| Locus of identity | Individual uniqueness, core essence, consistency | Close relationships define the self, others’ outcomes are my outcomes | Social identification, group defines self, groups’ outcomes are my outcomes |
| Locus of agency | Belief in individual agency, responsibility | Role responsibilities determine behaviour, achievement requires interdependence | Groups as agents, achievement based on collective interdependence |
| Locus of obligation | Self-interest primary, pursuing personal preferences, self-actualization, freedom, independence | Responsiveness to others’ needs, listening to their advice, maintaining harmony in relationships | Obligation to group welfare, duty, conformity to group norms |

5.3.2.3 Analytic procedure

The answers were content analysed using the coding procedure based on the criteria provided by Somech (2000), with the additional distinction between relational and collective selves and the corresponding manifestation in self-construals as suggested by Brewer and Gardner (1996). If a single statement contained several different meaning units, the statement were duplicated and to allow coders¹⁶ to code each meaning unit separately. The coding scheme is detailed in Table 11.

Table 11: TST coding scheme of the present study

| Category | Sub-category | Example | Code | Coding sequence |
|---|--|---|------|-----------------|
| References to observable, physical attributes of self | Physical | "fat"; "35 years old" | A | 1 |
| Social role: References to social role, institutional membership, or other socially defined status | Any reference to family | "a father", "a husband", "married" | B1 | 2 |
| | Residence | "a New Zealander" | B2 | 3 |
| | Specific interpersonal relationships to friends and co-workers | "a good friend"; "part of the team" | B3 | 4 |
| | General work role | "a production manager" | B4 | 5 |
| | Affiliation to impersonal group | "a socialist"; "a Christian"; "French", "a Toyota man", "All Black fan" | B5 | 7 |
| Attributive: References to personal styles of acting, feeling, and thinking | Hobbies, leisure preferences | "a reader"; "a football player", "interested in tramping" | C1 | 6 |
| | Aspirations, expressions of emotion | "hoping to be a teacher one day", "happy" | C2 | 8 |
| | Personal traits | "honest"; "ambitious", "moody", "a hard worker", "frank", "a good listener" | C3 | 9 |
| Self-references that are comprehensive and suggest membership in a universal, undifferentiated category | Global | "a human being"; "an organism", "a male" | D | 10 |

It is important to note that the analysis did not refer to the actual properties the participant adjudged him- or herself, which may or may not be realistic or true. It only

¹⁶ In order to avoid bias, two coders were chosen who do not originate from any of the societal cultures where the case studies were located, The two coders were raised and spent most of their lives in Malaysia and Germany, respectively.

referred to the *frame of reference* the individual used (personal, relational, or collective) in her spontaneous self-description.

Prior to coding, the Spanish statements were translated to English, following the example of Watkins and colleagues (1997). The aim of the translation was to ensure equivalence in meaning of the statements rather than a literally identical conversion. The translational accuracy of the statements was insured through subsequent independent back-translation by a Spanish native speaker with high level of proficiency in English¹⁷. Inconsistencies in meaning between the original Spanish statements and the Spanish back-translation of the English translation were discussed and lead to a revision of the Spanish translation of the statements to ensure equivalence of meaning.

Prior to the final coding, some statements were pilot coded by a coder who did not take part in the subsequent analysis. Then only a mediocre inter-coder agreement was achieved (about 75%). After the refinement of the coding categories and the introduction of a priority sequence between categories, which determined clear rules to the coders in case of ambiguous statements, the final coding is conducted (see Figure 14).

¹⁷ As attested by a university degree in English studies and extensive experience in English-speaking countries.

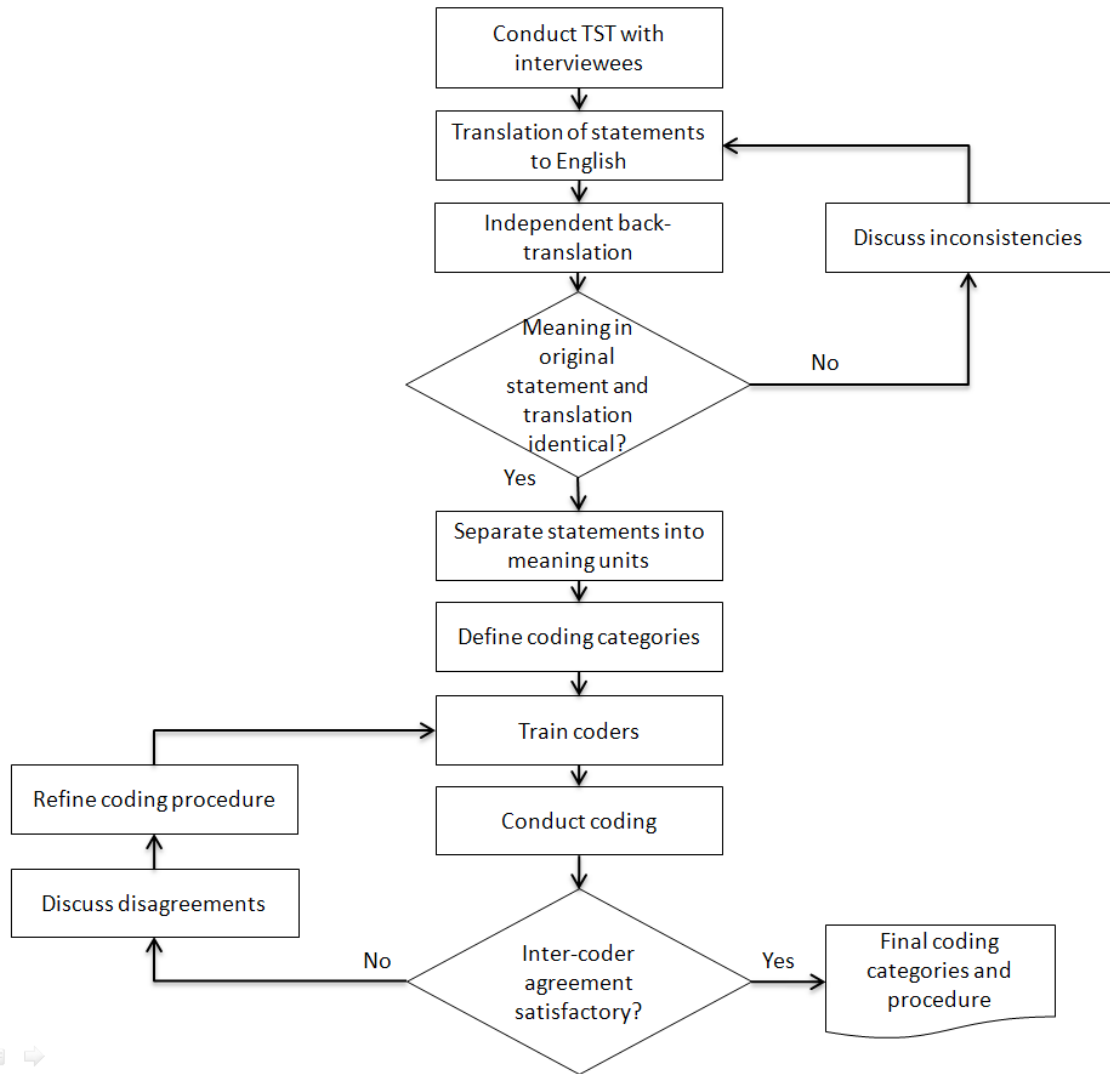


Figure 14: Translation and pilot coding process of TST data

All statements were coded in English language by two coders independently: The main researcher and one who was blind to the origin of the participants and had no involvement in the fieldwork nor the translation or back-translation process. An overall inter-coder agreement of $t=95.4\%$ was reached. The remaining approximately 5 percent of coding disagreements were subsequently discussed and reconciled among the two coders. For this purpose, the main researcher, who was involved in the fieldwork could greatly contribute by providing additional information and thus give a more holistic picture of the scene than a written piece of text can give alone. The final coding is assigned based on consensus between the two coders.

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As Brewer and Gardner (1996) suggested, a *personal* self-construal is one that contained observable, physical attributes, traits, activities, aspirations and expressions of emotions (e.g., "punctual", "happy to be alive") without social reference. *Relational* self-construals refer to a specific social roles such as relationship to co-workers, friends and family ("part of our team") or an according socially defined status (e.g., "married"), while the *collective* self implies membership in a depersonalised social collective (e.g., "a New Zealander") or a universal, undifferentiated category ("a male", "a human being").

Accordingly, the physical and the attributional categories A and C were used to characterise the personal self, while the global category D and the impersonal social categories B2, B4 and B5 represented the collective self. The remaining personal social categories B1 ("family") and B3 ("friends" and "co-workers") represented the relational self-construal (see Table 12). The second coder was blind to this analysis scheme, i.e. he was not aware which codes would be considered a manifestation of which self-construal.

Table 12: Analysis scheme of coded meaning units

| Self-construal | Personal self | Relational self | Collective self |
|-----------------------|----------------------|------------------------|------------------------|
| Category codes | A, C | B1, B3 | B2, B4, B5, D |

To control for variations in the number of meaning units per participant, the calculation of the salience of the different self-construals was based on their proportion of meaning units to the total number of meaning units in the responses.

$$x_{i,personal} = \frac{n_{i,personal}}{N_i}$$

$$x_{i,relational} = \frac{n_{i,relational}}{N_i}$$

$$x_{i,collective} = \frac{n_{i,collective}}{N_i}$$

i: participant

N: total number of meaning units

n: number of meaning units in relation of different self-construals

$$x_{i,personal} + x_{i,relational} + x_{i,collective} = 1;$$

$$n_{i,personal} + n_{i,relational} + n_{i,collective} = N_i$$

The end result from the TST constitutes a triple of percentages for each test participant that adds up to 100% and characterises the self-concept of the individual. It is important to note that this information is used not for testing hypotheses, but for viewing the meanings that emerge in the subsequent in-depth interview in context. This triple of percentages is entered in the software QSR NVivo Version 8.0 and 9.0 as attributes for each participating individual.

5.3.3 Inductive thematic analysis of interview data

While the TST in the first part of the interview is concerned with internalised cultural values, the second part of the interviews seeks an understanding of the meanings group members attribute to CI. The analysis of this second, in-depth part of the interview is based on the assumption that the way the interviewees frame their answers reflects intimately and profoundly cultural meanings. The in-depth interviews often result in highly detailed and authentic qualitative reports or stories, which thus permit insights about the processes that provide meaning to the individuals.

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The purpose is to learn about the meanings that provide guidance in relation to CI to the individual. Thus the analysis is concerned with the group members' subjective definition of the situations, their motives and purposes that lead their behaviour of CI, and the meaning attached to the behaviours of others.

Thematic analysis can be seen as one of the “foundational methods” in qualitative research methods that can be applied across a wide range of theoretical approaches (Braun & Clarke, 2006). It is “a method for identifying, analysing and reporting patterns (themes) within data” (Braun & Clarke, 2006, p. 79).

The coding of the data is an interpretive act through which I tried to discern the meanings that are conveyed through the verbal – and sometimes nonverbal – accounts of the interview. While the main data source was the verbatim transcript of verbal and nonverbal utterances, additional notes of contextual remarks and spontaneous thoughts were taken throughout each interview and contributed to a more holistic understanding of the interview situation.

As opposed to the TST data, where data was translated to English, the in-depth interview transcripts were coded in the original language of the interview to preserve the (often more complex) meanings as faithfully as possible. Only excerpts that were used for illustrative purposes in this thesis were translated¹⁸ (after the coding), if required. The communication style of the thesis tries to preserve the original statements as much as possible, in order to limit bias.

Coding served to explore the meanings expressed in the interviews, with special regard to the rich and perhaps specific themes by the different employees, without imposing my own “theoretical” (etic) categories on the data. Stake (2005) neatly summarised the aims of such an analysis as the “accurate description and subjective, yet disciplined, interpretation; a respect for and curiosity about culturally different

¹⁸ Which were added as Annotations in NVivo (see Appendix E for explanations of key NVivo terms)

perceptions of phenomena; and empathetic representations of local settings" (2005, p. 459).

Therefore I identified an inductive approach as the most appropriate way to systematise the individual subjective meanings. However, such an inductive approach necessitates the absence of well-defined *a priori* categories. I chose Braun and Clarke's (2006) structured method of thematic analysis as systematic coding procedure. It is applicable to both realist and social constructionist ontological positions, which makes it particularly suitable for this project (see Chapter 4.3). The different phases of the methods are summarised in Table 13.

Table 13: Phases of thematic analysis (Source: Braun & Clarke, 2006, p. 87)

| Phase | Description |
|---|--|
| 1. Familiarizing oneself with your data | Transcribing data (if necessary), reading and re-reading the data, noting down initial ideas. |
| 2. Generating initial codes | Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code. |
| 3. Searching for themes | Collating codes into potential themes, gathering all data relevant to each potential theme. |
| 4. Reviewing themes | Checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic "map" of the analysis. |
| 5. Defining and naming themes | Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme. |
| 6. Producing the report | The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis. |

Due to its flexibility, thematic analysis is a research tool that is able to provide a "rich and detailed, yet complex, account of data" (Braun & Clarke, 2006, p. 78). It was conducted in QSR NVivo Version 8.0 and 9.0. The use of this software facilitated hugely the systematic development of a complex and evolving coding structure, while

preserving the unique representations that constitute the verbatim data. Explanations of some NVivo key terms as relevant for this thesis are detailed in Appendix E.

Table 13 serves as a roadmap for the following subsections which describe the steps of the analysis in more detail.

5.3.3.1 Familiarizing oneself with the data: Transcribing and checking

Much of the data was transcribed by myself, the main researcher. In other instances, I had support from native speakers who could do the transcribing more efficiently and accurately, for which I am very grateful.

In all instances, however, I listened to the audio recording myself to note down important passages and to take complementary interview notes. Once transcribed, I read and checked all transcriptions for mistakes and imported them into NVivo. Reading the data in an active way helped immensely to “re-live” the interview scene and reflect upon the meanings expressed in the interview. In this sense meanings were conveyed at different levels: Both at semantic (explicit) level, but also at an implicit level.

5.3.3.2 Generating initial codes: Empirical deriving free nodes

During initial coding, commonly recurring themes were used to define *free nodes* in NVivo, i.e. categories from the data that directly represent the meaning of the interviewee. While some latent themes could be found across the whole data set, other more specific aspects were idiosyncratic for specific interviewees. Therefore free nodes had an evolving character and were constantly reviewed with regard to their internal consistency. As the interview questions were asked in an open-ended manner, these themes did not necessarily bear any relation to the questions asked.

Often, several iterative loops of deleting, adding, or amending nodes were necessary. I used triangulation between data sources (such as my observations, interview notes and the transcript) as well as matching of key themes across different interviews to validate the nodes and their underlying themes. A key aspect at this stage was to

strike a balance between rigour and flexibility in terms of the newly emerging categories.

5.3.3.3 Searching for themes: Developing the categories as tree nodes

Once a theme was identified as reoccurring during the interviews and/or of outstanding importance for the purposes of the study so that even a single occurrence would justify a designated category, NVivo *tree nodes* were created. The aim was to define a coding structure in such a way that the themes form a coherent pattern within the data set¹⁹. In many instances existing free nodes were transferred into tree nodes. These nodes allowed for a hierarchical organisation of the themes in broader categories and more fine-grained sub-categories. This structure was used to cluster related themes together across the interviews, yet allowing for very precise coding into (sub-) themes which reflected the idiosyncrasies of the respondents' answers.

Each node was defined according to attributes that create its meaning, for example a node "perceived autonomy" would refer to and condense interview passages in which interviewees expressed a feeling of autonomy as a result of CI practices. The greatest challenge in the coding procedure was to combine the exploration of ever-emerging new themes and nuances in meaning during the interviews with the internal consistency of the categories, which is the bedrock of a rigorous analysis. One key step toward achieving a consistent coding scheme was the explicit written verbal description of a new node to clearly define its content within NVivo.

In the process of coding it was often required to dynamically expand or consolidate the coding structure to best fit the empirical data. By implication, the nodes are best understood as dynamic categories during the coding process. Only when additional refinements in the coding structure ceased to add anything substantial, the process of

¹⁹ A single coding structure was used *across* different interviewees and cases. While I acknowledge that the ascriptions of meaning are individual constructions (and therefore potentially idiographic), a common culture should make them, at least in part, shared, i.e. intersubjectively available and thus justify a unified coding approach.

coding adaptation and refinement was stopped. When the evolving coding structure reached stability, it could be assumed to adequately represent the data – an idea similar to “theoretical saturation” as part of “reaching closure” in Eisenhardt’s (1989) well-known methodology.

5.3.3.4 Reviewing the themes: Categorizing the contributions

At a relatively late stage of the analysis (after fieldwork of the second case study), a pervasive yet loose structure emerged²⁰ from the overall set of interview data. Interviewees would describe events or their interpretations either from a more passive “culture-perceiving” view or a more active “culture-shaping” viewpoint, in some instances both. In many but not all cases the general workforce appeared to more passively perceive and interpret organisational practices.

While it was relatively straightforward to identify the cultural reception process, other people, often persons in leadership positions, have a double role, being involved in both passively perceiving and actively shaping culture. In order to code systematically it was necessary to decide case-by-case if the uttered refers to a perception of the current culture, or rather an action that is used to shape culture. In some cases it was both.

This perspective can be understood to reflect the socially constructed nature of the organisational culture and can contribute to understanding the social construction of culture as the result of an emitting-reception process and ultimately shared meanings within the group.

Having realised that, I realigned all codes according to this dichotomy by deciding whether a contribution should be classified as perceiving or shaping culture. An essential aspect in making this call was my own personal prolonged exposure to the cultural scene which helped gain a more holistic understanding of the group’s culture.

²⁰ Of course, the structure did not literally “emerge” from the data but was rather a result from my own sense-making activities after a long exposure to the data.

5.3.3.5 Defining and naming themes: Detachment from managerial rhetoric

I found that using existing categories or constructs such as those described in the Toyota Way (TW, Toyota Motor Corporation, 2002), for instance, the notion of “Respect for People”, inevitably leads to a “self-fulfilling prophesy” between the data and categories used. This is because the respondents answers always rendered – to a degree – the managerial rhetoric used in the organisation; this tended to misguide the coder (i.e. myself) to make imprecise attributions through the usage of broad terms such as “Respect for People”.

In labelling the coding structure, I chose deliberately not to make reference to the catchwords of “Respect”, “Kaizen”, “Teamwork”, “Genchi Genbutsu”, “Challenge” that form part of the official terminology of the TW (Toyota Motor Corporation, 2002). This was done in order not to contaminate the analysis through a mere reproduction of remnants of managerial rhetoric.

Furthermore, I avoided the use of “simple and deterministic labels” (Coffey & Atkinson, 1996, p. 30) in order not to miss out in the course on the specific meanings of the individual. In this connection, it is important to note that meanings do not reside in the constituents parts of verbal messages *per se*; rather, they evolve from a holistic understanding of the situation.

5.3.3.6 Producing the report: Triangulation with other data sources

Together with the subsequent group workshop, the interviews provide the richest data and therefore require a careful approach to the data analysis.

Different people within the same workgroup can have opaque, incomplete, or even contradictory views of the group’s culture. The aim of the thematic analysis of interview material is to provide an account of recurring themes that can be triangulated with other data sources in a later stage of the analysis.

In addition, the thematic bottom-up analysis approach serves “to break up and segment the data into simpler, general categories and is used to expand and tease out the data, in order to formulate new questions and levels of interpretation” (Coffey &

Atkinson, 1996, p. 30). The thematic analysis is used as a heuristic yet systematic way to interact with and actively reflect upon the data, producing a coherent map of the cultural meanings across all case studies. The analysis both simplified the data by discerning common meanings across the interviews and *expanded* the data through structuring it according to the dichotomy of culture-perception and shaping.

5.3.4 Workshop analysis

5.3.4.1 Witnessing the group culture

While the previous steps look at a group's culture from the perspective of the constituent individuals, the workshop treats culture as a *group-level phenomenon in vivo*.

As Rousseau (1990) explained:

This constructed view of the world reduces equivocality and uncertainty of events and typically involves the efforts of two or more people in the process of interpreting and attaching meanings to such patterns, hence the expression "social construction of reality." Behavioural norms are an example of a social construction experienced by members; these norms require *mutuality and sharing as a basis for their existence*. (p. 159, italics added)

The workshop aims at capturing the group dynamics of this *mutuality and sharing*. It can be understood as an opportunity to witness how organisational members create and sustain their social reality, or, put another way, the social construction of the organisational culture in the making.

As stated previously, the tangible results of the workshop (i.e. the two-dimensional arrangement of cultural themes) are as important as the group discussion process that leads to it²¹. Therefore the workshop produced multiple data sources: Firstly, the

²¹ This is an interesting example of how the same technique (the group workshop) can be viewed from apparently contrasting paradigmatic perspectives. A positivist (functionalist) viewpoint would use the final positions of the themes on the whiteboard and take them at face value to constitute the organizational culture and its relevance for CI in the organization. A constructionist viewpoint, in

pictures taken in the course of the workshop that capture the locations of the cultural themes (see Figure 15) and also movements that led to the final positions. Secondly, the audio transcripts that captured the group discussion.

5.3.4.2 Thematic analysis

Therefore the workshop analysis worked on different levels. The qualitative analysis of the workshop transcripts is conducted in a similar way as the thematic interview analysis described in Chapter 5.3.3 and entered in NVivo. In the workshop analysis, however, there are several additional features:

- Presence of multiple actors, which requires the coding into different NVivo cases;
- Group dynamics that unfold during the workshop: Boundaries between “shaping” and perceiving culture are more blurred;
- Presence of cultural themes on cards, which present a tangible “centre point” around which discussions often evolved and show the different meanings different people ascribe to them.
- When several people talk at the same time, it is difficult to understand and capture the discourse in a written transcript.

5.3.4.3 Workshop analytical tool

The second tool used to analyse the workshop results is what I named Workshop Analytical Tool (WAT). Its purpose is to condense the dynamics of the group workshop into a manageable format. It tracks the movements of the cards in terms of *typicalness* and *importance for CI* during the course of the workshop and rates the degree of agreement within the group when a cultural theme is moved. This tool

contrast, would consider the group workshop itself as an opportunity for the researcher to participate in the process of social construction and reconstruction of the group’s culture. Neither of the viewpoints can claim – in my view – exclusive validity. They should be viewed as complementary and not competing.

should be viewed as complimentary to rather than competing with the thematic analysis of the verbatim workshop transcript.

It is based on a spreadsheet software (Microsoft Excel ©) and serves for both the evaluation of the pictures (see an example in Figure 15) and the analysis of the dynamics of the card locations (see Figure 16).

The first step was to measure the locations of the different themes in two-dimensional arrangement. Measuring these locations on the whiteboard allowed to quantify the degree to which cultural themes are considered *typical* (horizontal axis) and *beneficial for CI* (vertical axis).

To measure the positions accurately I scaled and superimposed an equidistant measurement grid (see Figure 15) on the photo. By repeating this procedure for subsequent pictures that were taken at later stages of the workshop, the changes in position of the cards as a result of the workshop dynamics were documented.

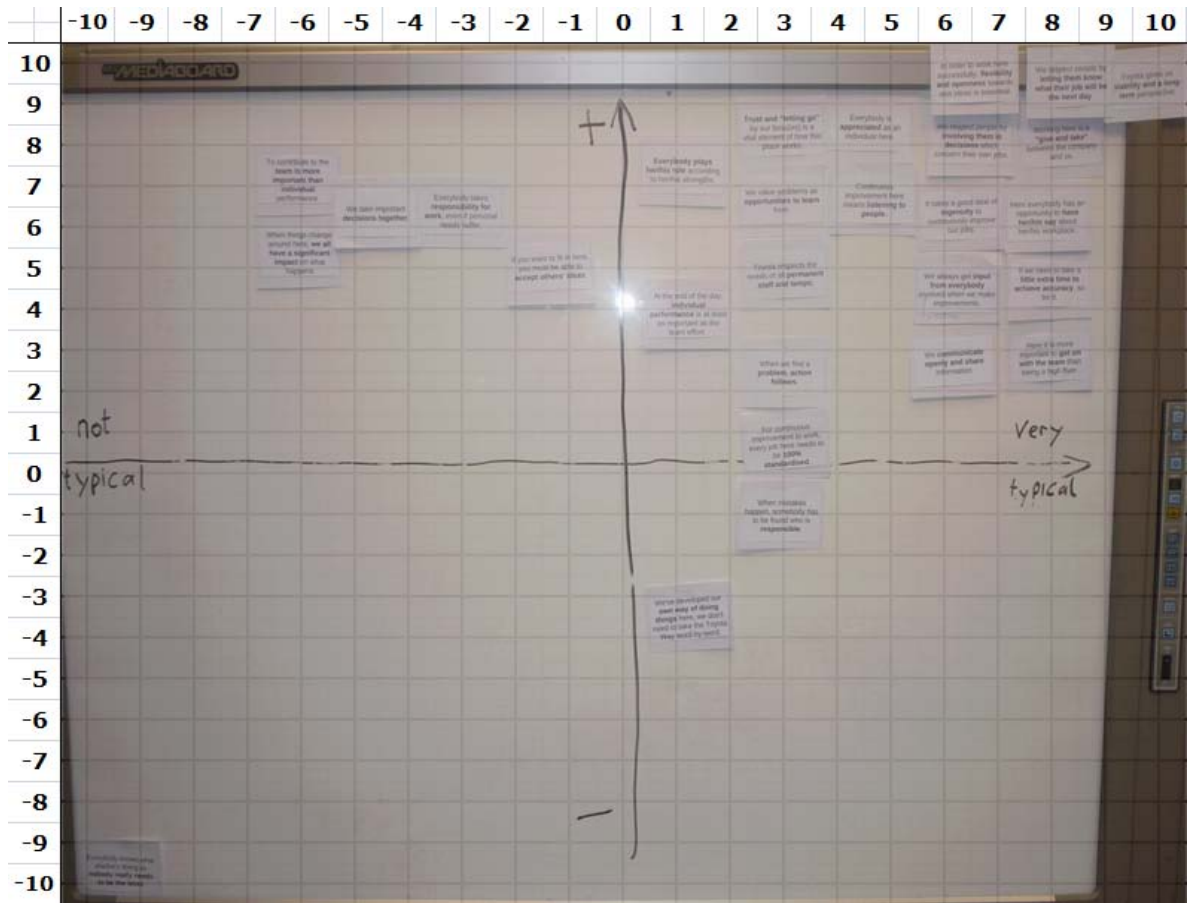


Figure 15: Semi-transparent equidistant measurement grid superimposed on workshop photo as used in the group analytic tool. Note how the maximum expansions of the cards on the boards and the neutral points of the board are set to scale to fit the measurement area.

The data on the degree that cultural themes were deemed *typical* (horizontal axis) and *beneficial for CI* (vertical axis) by the workshop participants were entered in the WAT spreadsheet. These coordinates were taken at several points in time and compared.

Agreement or disagreement of other workshop participants with the position of a cultural theme during the workshop often happens in nonverbal ways or through utterances whose dynamics cannot be captured adequately in a written transcript, even if it were done in a very elaborate way. Therefore I decided to complement the workshop transcript with a rating of agreement/disagreement which enters the WAT.

For this end, for each reading of coordinates, the corresponding time in the audio track was recorded and the degree of agreement amongst the workshop participants rated on a four-point rating scheme, ranging from *open disagreement* over *no clear*

reaction and *cautious agreement* to *open consensus* in the group concerning the position of the cultural scheme on the white board. I carried out this rating based on the audio recording, written notes and my observations during the participation in the workshop.

An example of the WAT is shown as Figure 16. Each line in the spreadsheet represents a cultural theme (column A). For each movement of the card, the position, actor (i.e. person moving the card), time of the audio transcript and the degree of agreement is recorded. In accordance with the different stages of a group workshop (see Section 5.2.5.2), the WAT records and evaluates several movements:

1. The initial horizontal position (how *typical* the cultural theme is deemed);
2. Subsequent reshuffling of the cards as a result of a re-consideration or deviant opinions in the group;
3. The initial vertical position (how *beneficial for CI* the cultural theme is deemed);
4. Subsequent reshuffling of the cards as a result of a re-consideration;
5. Final position in horizontal and vertical coordinates at the end of the workshop²².

Thus it was possible to triangulate the position of a card (a) with the degree of nonverbal or verbal agreement, (b) the categories of the thematic analysis of the workshop transcript, (c) the order in which a card gets picked by the workshop participants²³, (d) the person who chooses the card, (e) the movement of the theme in terms of the change of its coordinates during the course of the workshop. Taken together, these aspects conveyed a fairly good impression of the relevance and the consensus around the respective cultural theme.

²² This Position was introduced because in several cases cards were moved accidentally while placing other cards.

²³ As described above, the participants are free to take a card of their own choice.

Chapter 5: Research Design

| Cultural theme | Before rework/initial | | | | n = six (Typical/typical) | | | | Initial position at end of workshop | | | | Beneficial/detrimental | | | | | | | | | | |
|--|-----------------------|----------|--------|-----------------------|---------------------------|----------|--------------|-----------------------|-------------------------------------|------------|----------|------------|------------------------|-------|-----------------------|------------|----------|-------|-----------------------|------------|----------|--|------|
| | Position | Time | Person | Assessment | Position | Time | Initiated by | Assessment | Position | Δ Position | Position | Δ Position | Position | Time | Person | Assessment | Position | Time | Initiated by | Assessment | Position | | |
| Which of the five individual performance is most important to the team effort? | 1.6 | 00:03:00 | Hyler | 2 - no clear reaction | 1.7 | | | | -0.2 | 1.2 | -0.3 | 4 | 01:10:00 | Staff | Agreement | 1.4 | | | | | | | -0.1 |
| Continuous improvement has more value to us as a people. | 4.7 | 00:05:34 | Affan | 2 - no clear reaction | 4.5 | | | | -0.2 | 4.7 | 0 | 6.1 | 01:10:30 | Hyler | Agreement | 1.4 | | | | | | | 0 |
| Correctly to appreciate for individual's ability. | 4.7 | 00:10:00 | Kan | 2 - no clear reaction | 4.4 | | | | -0.3 | 4.4 | -0.1 | 8.4 | 01:15:00 | Affan | Agreement | 1.4 | | | | | | | 0 |
| It is not to know what to do or doing somebody else's job for the sake of it. | -9.4 | 00:10:00 | Kan | Agreement | -9.4 | 01:01:40 | Hyler | Agreement | 0 | -9.4 | 0 | -9.4 | 01:04:50 | Staff | Agreement | -9.4 | | | | | | | 0 |
| It is not to know what to do or doing somebody else's job for the sake of it. | 1.4 | 00:24:10 | Affan | 2 - no clear reaction | 1.4 | | | | -0.2 | 1.2 | -0.4 | 7.3 | 01:04:50 | Hyler | Agreement | 7.4 | | | | | | | 0.1 |
| It is not to know what to do or doing somebody else's job for the sake of it. | 6.3 | 00:27:50 | Hyler | 2 - no clear reaction | -2.4 | 00:36:00 | Staff | Agreement | -2.4 | -2.4 | -3.1 | -4.4 | 01:10:50 | Staff | Agreement | 6.4 | | | | | | | 0 |
| For continuous improvement to work, every job has to be done in the right way. | 7.6 | 00:27:50 | Hyler | 2 - no clear reaction | 2.4 | 00:55:20 | Staff | Agreement | -5.2 | -5.2 | -4.4 | 0.6 | 01:10:30 | Hyler | Agreement | 0.7 | 01:24:50 | Staff | | | | | -0.2 |
| It is not to know what to do or doing somebody else's job for the sake of it. | 7.6 | 00:29:20 | Hyler | 2 - no clear reaction | 7.6 | | | | -0.6 | 7.6 | -0.1 | 6.2 | | | | 6.5 | | | | | | | 0 |
| It is not to know what to do or doing somebody else's job for the sake of it. | 7.6 | 00:29:20 | Kan | 2 - no clear reaction | 7.6 | | | | -0.6 | 7.6 | -0.1 | 6.2 | | | | 6.5 | | | | | | | 0 |
| It is not to know what to do or doing somebody else's job for the sake of it. | 7.6 | 00:29:20 | Kan | 2 - no clear reaction | 7.6 | | | | -0.6 | 7.6 | -0.1 | 6.2 | | | | 6.5 | | | | | | | 0 |
| It is not to know what to do or doing somebody else's job for the sake of it. | -0.7 | 00:29:50 | Staff | 2 - no clear reaction | -1 | | | | -0.3 | -1.4 | -0.7 | 5.1 | 01:07:40 | Kan | Agreement | 5 | | | | | | | -0.5 |
| It is not to know what to do or doing somebody else's job for the sake of it. | 6.3 | 00:30:00 | Hyler | 2 - no clear reaction | 6.2 | | | | -0.6 | 6.4 | 0.3 | 9.4 | 01:20:00 | Staff | Agreement | 9.4 | | | | | | | 0 |
| It is not to know what to do or doing somebody else's job for the sake of it. | 6.3 | 00:31:40 | Staff | 2 - no clear reaction | 6.2 | | | | -0.3 | 6.3 | -0.1 | 5.7 | 01:19:30 | Staff | Agreement | 6.3 | | | | | | | 0 |
| It is not to know what to do or doing somebody else's job for the sake of it. | -1 | 00:31:30 | Hyler | Agreement | -1 | 00:41:00 | Hyler | Agreement | -1 | -1 | -1 | 7.3 | 01:05:00 | Affan | Agreement | 7.4 | | | | | | | 0 |
| It is not to know what to do or doing somebody else's job for the sake of it. | 6.4 | 00:40:30 | Kan | 2 - no clear reaction | 6.2 | | | | -0.2 | 6.2 | -1 | 9.4 | 01:10:00 | Staff | Agreement | 9.4 | | | | | | | 0 |
| It is not to know what to do or doing somebody else's job for the sake of it. | -4.6 | 00:17:50 | Hyler | Agreement | -4.6 | 00:37:20 | Kan | Agreement | -4.6 | -4.6 | -4.6 | 7.8 | 01:10:30 | Staff | Agreement | 4.6 | 01:24:30 | Kan | 2 - no clear reaction | | | | 0 |
| It is not to know what to do or doing somebody else's job for the sake of it. | 2 | 00:24:20 | Kan | Agreement | 2 | | | | -0.3 | 2.4 | -0.1 | 8.3 | 01:17:20 | Staff | Agreement | 2.4 | | | | | | | 0 |
| It is not to know what to do or doing somebody else's job for the sake of it. | 4.7 | 00:16:40 | Staff | 2 - no clear reaction | 6.4 | 00:35:50 | Hyler | Agreement | 1.7 | 6.3 | 1.4 | 4.5 | 01:05:40 | Staff | Agreement | 4.5 | | | | | | | 0 |
| It is not to know what to do or doing somebody else's job for the sake of it. | 6.3 | 00:24:20 | Hyler | 2 - no clear reaction | 6.2 | | | | -0.4 | 6.2 | -0.4 | 2.3 | | | | 2.7 | | | | | | | -0.1 |
| It is not to know what to do or doing somebody else's job for the sake of it. | 7.4 | 00:40:57 | Hyler | 2 - no clear reaction | 7.1 | | | | 0.4 | 7.1 | 0.4 | 9.5 | 01:10:30 | Staff | Agreement | 9.5 | | | | | | | 0 |
| It is not to know what to do or doing somebody else's job for the sake of it. | 4.7 | 00:40:07 | Hyler | 2 - no clear reaction | 7.1 | 00:24:50 | Hyler | 2 - no clear reaction | 2.4 | 5.5 | 1.1 | 1 | 01:14:50 | Hyler | Agreement | 1.1 | | | | | | | 0 |
| It is not to know what to do or doing somebody else's job for the sake of it. | -7.4 | 00:10:00 | Staff | 2 - no clear reaction | -4.7 | 00:41:00 | Hyler | 2 - no clear reaction | -2.7 | -4.7 | -2.3 | 6.2 | 01:14:30 | Kan | 2 - no clear reaction | 6.3 | | | | | | | 0 |
| It is not to know what to do or doing somebody else's job for the sake of it. | 2.4 | 00:10:30 | Hyler | 2 - no clear reaction | 2.4 | | | | -0.3 | 2.4 | -0.1 | 6.4 | 01:17:00 | Staff | Agreement | 1.4 | | | | | | | 0 |
| It is not to know what to do or doing somebody else's job for the sake of it. | 4.0 | 00:23:00 | Hyler | Agreement | 1.0 | 00:46:50 | Affan | Agreement | -3.0 | 1.3 | -1.7 | -3.4 | 01:12:50 | Hyler | Agreement | -3.5 | | | | | | | -0.1 |
| It is not to know what to do or doing somebody else's job for the sake of it. | -9.7 | 00:10:40 | Hyler | 2 - no clear reaction | 2.4 | 00:42:00 | Staff | Agreement | -12.1 | 2.4 | -9.7 | -9.7 | 01:10:30 | Staff | Agreement | -9.7 | | | | | | | -0.1 |
| It is not to know what to do or doing somebody else's job for the sake of it. | -5.4 | 00:27:00 | Hyler | Agreement | -5.4 | | | | -0.2 | -5.6 | -0.2 | 8.4 | 01:10:30 | Hyler | Agreement | 5.6 | | | | | | | 0 |
| It is not to know what to do or doing somebody else's job for the sake of it. | 3.1 | 00:18:50 | Hyler | Agreement | 3.1 | | | | -0.2 | 3.1 | -0.1 | 3.3 | 01:12:00 | Staff | Agreement | 3.4 | | | | | | | -0.1 |
| It is not to know what to do or doing somebody else's job for the sake of it. | 6.3 | 00:06:30 | Hyler | 2 - no clear reaction | 6.3 | 00:45:50 | Hyler | Agreement | 0 | 6.3 | 0 | 6.3 | 01:14:40 | Staff | Agreement | 6.3 | | | | | | | 0 |

Figure 16: Example of workshop analytic tool (WAT)

5.3.4.4 Differences between interviews and workshop

Table 14 shows the key differences in purposes and outcomes between interviews and the group workshop.

Table 14: Comparison of in-depths interviews and group workshop

| Feature | Interviews | Workshop |
|--------------------------------|---|--|
| Level of analysis | Individual | Group |
| Dynamics | Static | Dynamic |
| Key features of data | Individual cognitions: Perceptions, interpretations, | Discussion, Rankings, functional classifications, |
| Cultural categories | meanings held by individuals | Shared meanings, group dynamics |
| Underlying probing | Individual meanings | Organisational culture in vivo: Social interaction |
| Principal data probing methods | Thematic analysis of understanding and meanings, | Observations, graphical display, group dynamics, thematic analysis |

Summing up, the group workshop unpacks culture as a system of (more or less) shared meanings and probes the agreement within the group with regard to the importance and relevance of specific cultural themes in relation to CI. It is based on

previously extracted themes from the interviews and looks at how individual meanings and interpretations become part of a shared meaning system of the group.

It is important to point out that, although delivering quantifiable results (i.e., the position of the cards on the two-dimensional array), the workshop does not draw on pre-defined cultural categories such as used in many quantitative studies, but uses emergent and culture-specific (i.e. emic) themes. Thus it provides a good example of how quantitative and rich qualitative data can complement each other.

5.3.5 Analysis of observations

Direct and participant observations were used to compare actual behaviour within the group with espoused values and verbal statements from interviews or on-the-job discussions. The aim was to capture social processes as they unfold rather than in the hindsight of participants. In order to preserve the impressions as authentically as possible, written or audio-recorded notes were taken and analysed according to the same coding criteria (“nodes” in NVivo) as interview data.

5.3.6 Analysis of secondary data

Complimentary to the fieldwork, company documentation such as quality and operation procedures, policy statements, internal newsletters, organisational charts as well as openly displayed information such as operational planning and performance displays were analysed to study how the organisation disseminates cultural values within the work group.

5.4 Linking Sources for Synthesis

The previous Section – 5.3 – was concerned with data *reduction* strategies that treated each data source independently. As opposed to that, the purpose of this last section of the research design Chapter is to describe the strategies that were used to link data sources and *synthesise* insights from different methods and levels of analysis.

The overall aim of this approach is to develop a chain of evidence that helps conceptually “unpack” the cultures of CI. This is best thought of as a “continuing and

systematized creative process which attempts to reconstruct the organization members' processes of creating meaning" (Schulz, 1995, p. 80).

Discerning patterns across the data sources, cases and levels of analysis is a complex, and often cyclical process. As opposed to the data reduction strategies where it was possible to describe the analytic steps in considerable detail, the synthesis is much less structured, not unlike puzzle-work (Lundberg, 1985) and needs to be done largely in "absence of routine formulas" (Yin, 2003, p. 57). Therefore the strategies for data synthesis are outlined only in broad strokes here.

However, it is possible to describe the initial steps: The next section describes the analysis of the link between the self-concept and the attribution of meanings at the individual level, while the subsequent section is concerned with the group level.

5.4.1 Looking for patterns between individuals' self-concepts and attributed meanings

Cultural theory predicts that the self-concept is highly relevant in terms of the meaning individuals ascribe to organisational practices (Erez, 2009, 2010; Erez & Earley, 1993). Thus comparing the self-concept with the second, in-depth part of the interview is based on the assumption that the way the interviewees frame their answers might reflect intimately their internalised cultural values.

For this purpose I investigate the relationship between the self-concept and the accounts given by the interviewees that describe how concepts or practices related to CI come to be meaningful for the individual. The analytic approach that links results from the TST analysis to the thematic analysis from the previous sections is outlined in Figure 17.

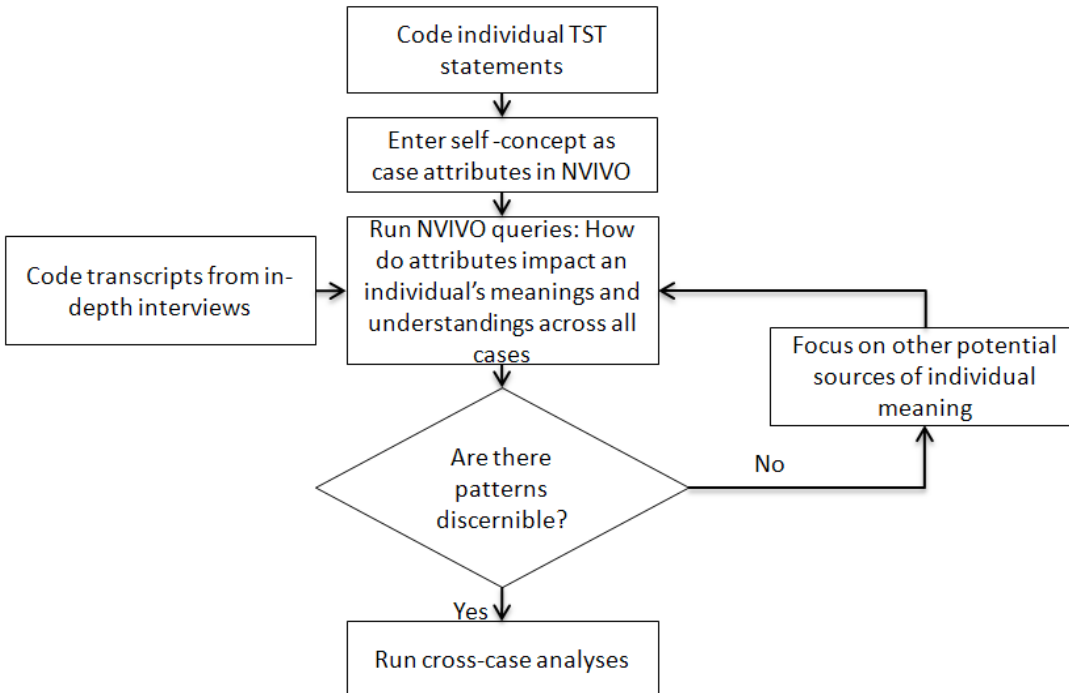


Figure 17: Analytic procedure for linking TST results with meanings

Individual meaning-making can be understood as shaping the group’s culture, which leads over to the following section.

5.4.2 Developing a chain of evidence to decipher group cultures

While the previous section described how the insights from different data sources are combined at the *individual* level, this section describes the synthesis of sources at the *group* level.

If meanings are socially produced and reproduced within the workgroup through social processes, the aim is to combine the insights from different data sources (see Figure 18) in order to analyse these social processes and the “structural conditions, that enable the individual accounts that are provided” (Braun & Clarke, 2006, p. 85) in the interviews.

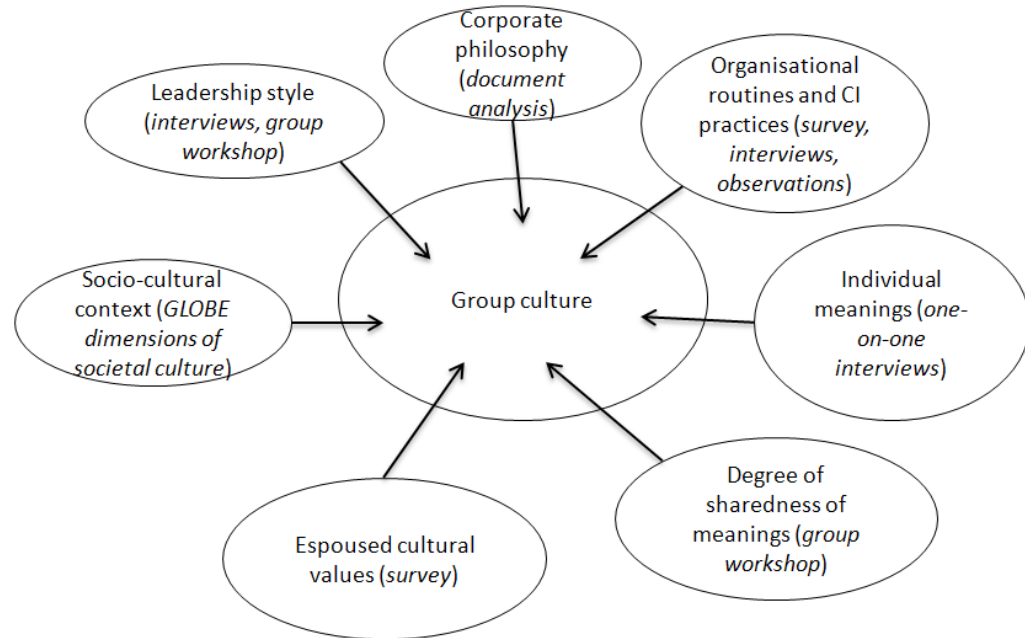


Figure 18: Antecedents of a group’s culture (with data sources in *italics*)

Owing to the consistent coding structure applied in NVivo it was possible to discern patterns of meanings across the different sources of data. It also facilitated comparative thinking and exploration across cases. Likewise, the dimensions of culture provided valuable data for comparative purposes. Testing of rival explanations and triangulation between different data sources were used to ensure the relevance and correctness of the findings (Yin, 2003).

The overall analytic strategy involved continuous matching of patterns between data sources and cases as well as explanation-building that link back to the original research questions. Investigating patterns across the data was an inductive and often iterative process, in which the results of one step resulted in emerging patterns and the formulation of new explanations and questions. This, in turn, determined the adequacy of the analytic approaches in the subsequent step. Consequently, the analysis was not predefined, but follows emerging leads and rival explanations.

Consequently, the data synthesis can only be described in broad strokes without providing interim findings. Figure 19 outlines the general approach which leads from

the individual left (left-hand side) toward deciphering the group level (right-hand side); however, without consideration of analytical iterations.

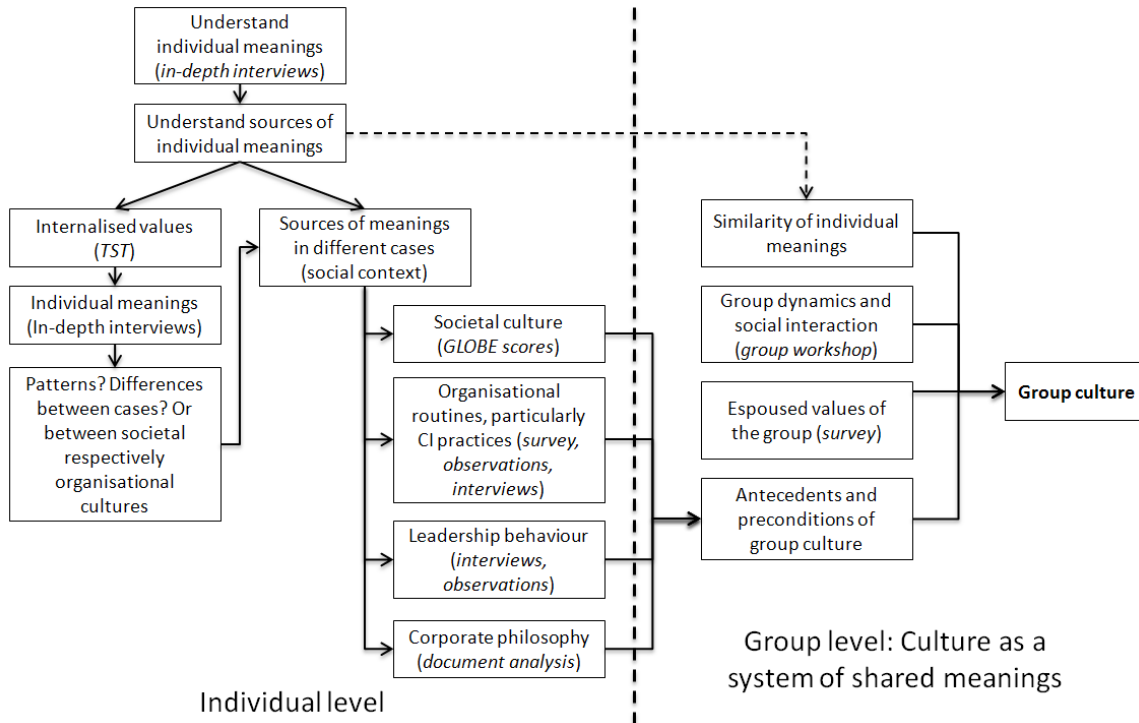


Figure 19: Outline of within-case analytic strategy (Arrows illustrate the sequence in which elements are linked to a chain of evidence; data sources are displayed in *italics*.)

5.4.3 Guiding questions

By expanding on the original research questions (see Chapters 1.5 and 5.1.1) I used the following guiding questions to discern patterns across the data

- What do recurring themes in the interviews and the workshop reveal about common meanings within each workgroup?
- How do group members perceive their role within the group?
- What are the underlying commonalities between individuals' meanings within one workgroup?
- What does it mean to be a member of the workgroup in terms of perceived duties and obligations toward the group?
- How do interactions of group members with persons within and outside the group differ?

Chapter 5: Research Design

- What are the key meanings involved in each group's cultural paradigm?
- What implication does this have for the perceived responsibilities for CI in the group?
- What are the differences between the meanings of organisational leaders (shaping culture) and the ones of other group members (perceiving culture)?
- What happens when conflicting meanings are confronted during the workshop?
- What are the key meanings through which group members make sense of CI and their role within the work group?
- Are there "cultural scripts" that guide action toward CI in the group?
- How do individual meanings facilitate or hinder coordinated action of the group toward CI?
- How does the picture change when meanings are considered across cases or even across the whole data set?
- In accordance with culture as a dual construct, individuals' meanings are the result of both internalised cultural values and social processes - What are the conditions under which each of these two factors becomes salient?
- How do the expectations about other group members' behaviour shape individual behaviour?
- Are there expectations of reciprocity of commitments to the group and how do these impact behaviours?
- What are the motivations or mechanisms through which new group members adopt meanings of the group?
- What are the key processes through which the group's culture is created and sustained?
- Does sharing the group's shared meanings imply any adaptive advantage for individual group members?

5.5 Chapter Summary and Conclusion

Following the identification of shortcomings of current research and based on the conceptualisation of culture of the present study, this chapter developed the research design. The first section worked to delineate the rationale of the overall case study approach. Consequently I described the methods that are applied in each case study, followed by the data reduction strategies with which the data from each method is analysed.

The sequence of methods consists of a locally administered questionnaire, observations, in-depth interviews and a concluding group workshop. It combines deductive methods such as the TST with the inductive methods such as the thematic interview and workshop analysis. The deductive elements allow rigorous cross-case comparisons while methods that follow an inductive approach permit preserving the original meanings in the data as much as possible and discern patterns without imposing predefined coding categories onto them. Using an emic but consistent coding framework across the entire data set, I tried to strike a balance between methodological rigour and flexibility toward emerging themes.

It is important to note that this sequence of methods does not randomly string together vaguely relevant methods. The different stages are highly interlinked and each method in the sequence is employed for a specific purpose and taps certain cultural leads.

The fourth and last section described how these cultural leads are synthesised to “re-construct” the group cultures and discern patterns. While the data reduction strategies are highly structured and have described in considerable detail, the data synthesis is an iterative and often cyclical process, in which each analytical step may lead to the emergence of new patterns and questions that determine the adequacy of the next step. Consequently the synthesis of sources is only schematically described: The general strategy leads from the individual-level toward culture as a group phenomenon. Cognisant of the concept of duality of culture, its purpose is to capture

the processes of how a culture of CI is constructed by individual meaning-making and social processes within the given context.

The systematic approach to the data gathering allows looking at the data from several different angles and at different levels: at the level of each individual pertaining to a case, all individuals from one group or societal culture, or even the entire set of respondents. Each of these perspectives follows its own rationale. The different data sources are triangulated following the case study logic. By seeing where the findings agree or disagree across cases helps discern what is universal or specific to the societal or organisational context, respectively.

The research design combines the strengths of qualitative and quantitative methods; only taken together they provide a holistic picture of the groups' cultures. It combines etic (culture-universal) methods with emic (culture-specific) approaches to culture and quantitative with qualitative methods. The main strengths of quantitative methods are for systematic inter-case comparisons (both on the individual and work group-level) while the insights from in-depth qualitative research are most suitable to explore the rich individual meaning-making for CI.

Having outlined the methods to be applied in each case, it is now appropriate to describe the multiple-case study design and the selection of cases in the following chapter.

Chapter 5: Research Design

6. Case Study Design and Selection

6.0 Introduction and Overview

This chapter seeks a space to delineate the logic of the multiple-case study design. It begins by explaining the complexity and necessary choices involved in cultural studies. This is followed by the theoretical and practical considerations that informed the case study replication logic. The chapter then proceeds to explain the rationale for the selection of the case studies in terms of organisational and societal affiliation. For this purpose, I demonstrate the centrality of the Individualism-Collectivism (I-C) dimension in cross-cultural variation. This sets the stage for a brief characterisation of the socio-cultural contexts in which the case organisations are located, followed by a description of the multinational organisations taking part in the study. The chapter concludes with a comparative description of the chosen work groups that explains how they fit into the replication logic of the multiple-case study design.

6.1 Multiple-Case Study Design

6.1.1 Cultural complexity

Any study of culture has to deal inevitably with multiple, complexly overlapping levels of culture – a group's culture is also part of the wider organisational, regional, and industrial cultures, which in turn are nested in the wider societal and greater regional cultures. Other influencing factors include religion, gender, ethnicity and professional subcultures (see Figure 20).

The *multiple culture perspective* (Sackmann & Phillips, 2004) proved particularly useful in evolving an awareness of cultural complexity and developing a structured approach.

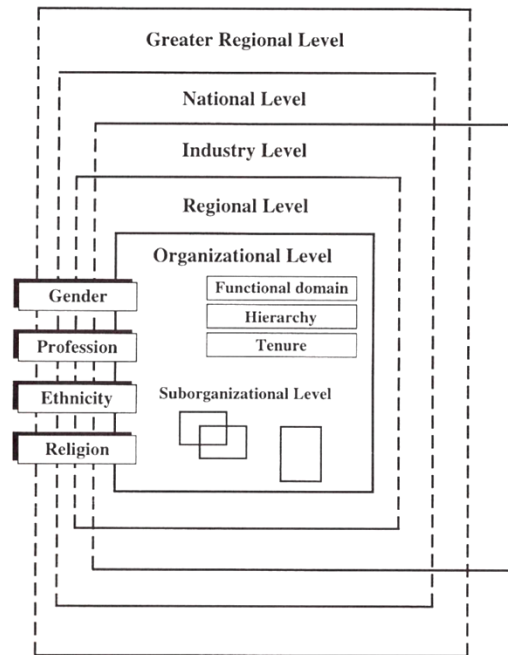


Figure 20: Cultural complexity (Source: Sackmann, 1997, p. 3)

Whereas the multiple cultures perspective *per se* does not make the assumption about the superior importance of societal culture (Boyacigiller, et al., 2004), the reviewed OM/QM literature suggests a salient role of *organisational and societal culture* for CI. Consequently, this is reflected in the case study design, in which organisational and societal culture were defined as the two alternating factors of the replication logic.

However, the methods that are employed in each case study are in principle designed to be able to pick up organisational subcultures, such as differences between functional, hierarchical or gender subgroupings within a workgroup. By doing this, this study heeds the counsel of Sackmann and Phillips (2003), who suggested that “in conducting research, it is important to make a conscious choice which levels to focus on and to be aware of potential influences from other levels” (p. 42).

6.1.2 Replication logic: Organisational versus societal culture

Sackmann (2001) stated that "results gained from qualitative research are... bound to the specific case under investigation. Direct comparisons cannot be made with results gained from other case studies unless these studies were designed for comparison" (p. 157). Therefore I followed the insight of Louis (1985) that “the culture in each setting

is often thrown into relief by the contrast between different settings and groups" (p. 91), and based the study on the juxtaposition of carefully matched cases.

In line with the argument of Fischer and colleagues (2005), the selection of case studies was to maximise within-group homogeneity and, in case of theoretical case replication (Yin, 2009), between-group cultural variability. The objective is to contrast the effects of societal and organisational culture in otherwise comparable organisational conditions.

As explained previously, functionally largely self-contained workgroups were deemed most likely to exhibit within-group cultural uniformity. Therefore an analysis at the workgroup-level was selected for the purpose of this study.

To achieve a replication logic (Yin, 2009), cases need to be matched in order to allow the observation of the consistent effect of societal culture (literal replication), while contrasting the effects of organisational culture (theoretical replication: contrasting results for predictable reasons). Vice versa, it would ideally allow for literal replication of the effect of organisational culture and theoretical replication of the effect of societal culture between the cases.

In order to observe the effects of societal culture, the aim was to select units within multinational organisations that are in themselves culturally uniform and located in different socio-cultural settings, with otherwise similar characteristics. A very similar sampling strategy was proposed by Denison and colleagues (2004) who suggested comparing subsidiaries of multinational organisations in different societal cultures.

6.1.3 Practical constraints in case selection

The number of case studies that can be conducted within the time and resource constraints of a doctoral research project is limited. As a result of these considerations a number of four to five in-depth case studies using the methodological approach described in the previous chapter appeared realistic. Moreover, the selection of case studies was carried out under additional constraints:

6.1.3.1 Language constraints

Proficiency in the country's language is essential for meaningful fieldwork and data analysis. For instance, Rao (2009) highlighted the importance of using the local language to "become a member" of the group and gain trust and access to information that would otherwise be beyond reach of the researcher. I am only fluent in German, English and Spanish which limits the possible societal contexts.

6.1.3.2 Economic resources

Travel and accommodation expenses due to the geographical locations of case studies are another limiting factor.

6.1.3.3 Cultural familiarity

Ideally, neither the organisational nor the societal culture would be identical with the researcher's home culture because cultural values and assumption are so deeply internalised and taken for granted that they are often unrecognizable for a cultural insider. In this connection, Schein (1984) explains that "we will not find alien form of perceiving, thinking, and feeling if the investigator is from the same parent culture as the organization that is being investigated" (pp. 12-13).

6.1.3.4 Access

The approach of this study requires in-depth fieldwork over an extended period of time at the participating sites and access to all levels of the organisation. Although the considerable expense of organisational resources can somewhat be compensated by the insights obtained through the study, there often remains considerable concerns on the part of the organisation.

Finally, the matching of cases was deemed the single most important factor, which will be discussed in the following section.

6.1.4 Screening candidate cases: Theoretical criteria for case selection

Yin (2009) explained that "the case study, like the experiment, does not represent a 'sample', and in doing a case study, your goal will be to expand and generalize theories

(analytic generalization) and not to enumerate frequencies (statistical generalization)” (p. 15). In this logic the characteristics of the multiple cases should be controlled for in order to reduce ambiguity and eliminate potential alternative explanations. This implies the need to substantially match the cases in terms of characteristics that are *not* subject the research questions.

The characteristics where between-case homogeneity is desirable include:

- CI maturity: Clearly, for the purposes of this study a high level of proficiency and consistent use of CI tools and techniques in the work groups essential. Using Yokozawa, Steenhuis, and de Bruijn’s (2010) framework of kaizen transfer, all cases should be inside or close to the last of the three stages of CI implementation, the integration stage.
- Industry type (service/manufacturing, capital/labour intensive, for profit/non-profit, private/public sector; cp. Phillips (1994, p. 387));
- Work group size (number of group members, proximity of workplaces);
- Features related to organisational control "include the size of the organization or work unit, the number of hierarchical levels in the organization, the degree to which organizational decision-making is centralized" (Oldham & Hackman, 2010, p. 472).
- Task characteristics (variety, complexity, repetitiveness, degree of technological requirements and the resultant opportunities for involvement in CI);
- Task and outcome interdependence within the group and the resultant need for interaction and cooperation between group members. According to Erez (2010) high task interdependence facilitates the establishment of a group culture;
- Cultural provenance of organisational leaders: They should be from the local cultural contexts (as opposed to expatriate managers) in order not to distort the results (Brannen & Kleinberg, 2000);

- Dynamics of work environment (variability or fluctuation in demands, frequency of change in production environment, e.g. rate of new projects or products);
- Strength of the organisational culture (Kotter & Heskett, 1992): A “strong” organisational culture will increase the likelihood that the complex features organisational culture be discernable in greater detail with the given limited resources.
- Homogeneity of corporate philosophy: The corporate philosophy of the multinational organisation should be applied systematically and consistently across the selected cases.

6.1.5 Pilot case study

Prior to the main case studies, a pilot case study was conducted to cover “both substantive and methodological issues” (Yin, 2009, p. 93), including pre-testing and fine-tuning of the data gathering methods.

Although the main criteria for the selection of the pilot case were geographic proximity and convenience of access, it was chosen to be similar in group size and also located in the manufacturing sector in order to ensure the full applicability of the methods “so that nearly all relevant data collection issues will be encountered in the pilot case” (Yin, 2009, p. 92). However, no results from the pilot case study were included in the main study.

6.2 Choice of Socio-Cultural Contexts

In order to clearly surface the impact of the societal culture and discern universal as well as specific aspects of cultures of CI, it is essential to select strongly contrasting cultural settings for the location of the cases. This section works to characterise the socio-cultural context in which the case studies are situated. I will start by showing the centrality of the I-C dimension of culture.

6.2.1 Centrality of individualism/collectivism

The bipolar distinction between individualism and collectivism refers to the fundamental difference between autonomy and social embeddedness of individuals. In other words, it reflects the importance and strength of individual attachment to groups. Whereas highly individualistic societies emphasise differentiation and autonomy of individuals from others, collectivistic cultures are characterised by interdependence and embeddedness of individuals in social groups (Oyserman, Coon, et al., 2002).

As pointed out by Erez and Earley (1993), the cultural dimension of individualism-collectivism (I-C) is one of the most central dimensions for understanding cultural variation between societies and also accounts for most of the variance in the cross-cultural data that is the basis for Hofstede's (1980a) seminal model of national culture. Gelfand and colleagues (2004) reported that in the preceding 25 years to their review alone, more than 1,400 articles had been published on the I-C dimension of culture and that it had attained a "status of a paradigm" (p. 437) in cross-cultural research.

In another comprehensive review of the literature, Oyserman, Coon and Kimmelmeier (2002) showed that the I-C dimension is implicated in many cognitive and social processes, including individual emotional expression, interpersonal communication and negotiation, workgroup behaviour, intergroup relations and job satisfaction. Another review showed that studies frequently found I-C to impact individual attitudes toward teamwork (Leung, et al., 2005). In consequence, I-C still continues to be the "main focus" of cross-cultural research (Boyacigiller, et al., 2004, p. 107).

Despite strong criticisms of conceptual ambiguity (most notably Oyserman, Coon, et al., 2002), it reflects beyond question one of the most essential aspects of cultural difference between societies (Triandis, 1995). Accordingly, it has been called "fundamental dimension of cultural variation" (Brewer & Chen, 2007, p. 133) or "core dimension of cross-cultural research" (Schimmack, Oishi, & Diener, 2005, p. 30).

6.2.2 Socio-cultural contexts of this study: New Zealand and Spain

6.2.2.1 New Zealand

New Zealand's (NZ) colonial history was largely defined through the British Empire; NZ is usually attributed to the Anglo cluster of societal cultures (Gupta & Hanges, 2004) and has indeed many cultural commonalities with other British ex-colonies like Australia or the USA.

It has been described as “as a country of rugged individualists in a dramatic rural landscape. The literary incarnation of this theme has a dark side, with an underlying sense of alienation and of distance” (Kennedy, 2008, p. 400).

Indeed, NZ's score of In-Group Collectivism from the recent GLOBE study (House, et al., 2004) ranks amongst the lowest of all participating 60 societies, only underbid by Sweden by a small margin. This low score reflects the relatively loose ties to family and friends.

In contrast, NZ ranks remarkably high on *Institutional* Collectivism, which reflects the importance of collective action in NZ society. An example might help to illustrate this: The devastating earthquake that struck Christchurch in February 2011 was followed by an impressive wave of solidarity from all over NZ. In this connection, Harris, Harvey and Huddart (2005) attest New Zealanders “a strong sense of community and belonging” (p. 6), which is also reflected in a very high score in the GLOBE dimension of Humane Orientation (see Figure 21, cp. Appendix B for explications of dimensions).

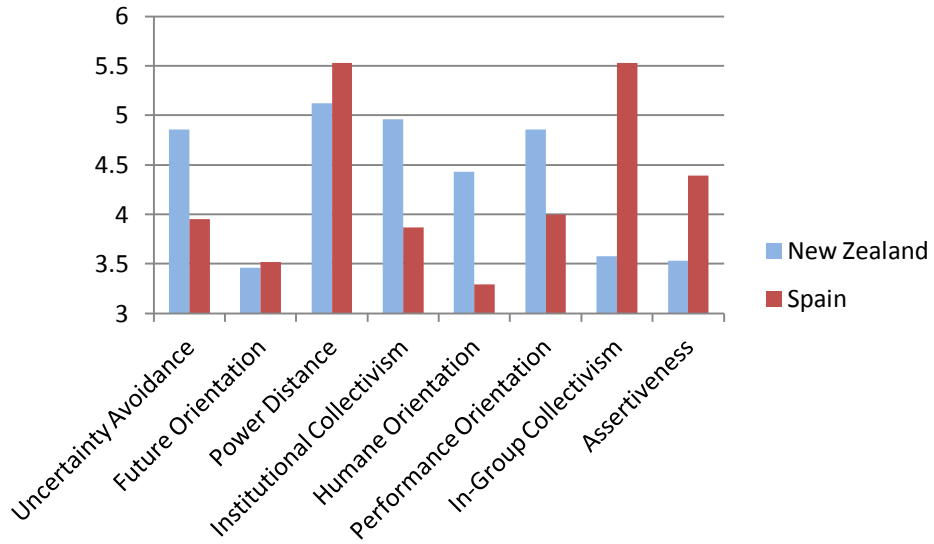


Figure 21: Comparison between NZ and Spain: GLOBE “as is” scores (Source: House, et al. (2004)

Further Kiwi¹ cultural traits that Harris and colleagues describe include “a strong belief in fair play, a healthy cynicism about authority structures, suspicion of exaggerated claims of success, distrust of ostentatious displays of wealth and a belief in their problem-solving resourcefulness” (p. 67).

They also make reference to another important culture attribute of NZ culture: A strongly egalitarian orientation, which is reflected in very low score of 22 in the dimension of Power Distance (see Figure 23) in Hofstede’s (1980a, 2001) framework of culture. Although the GLOBE (House, et al., 2004) dimension of Power Distance does not reflect this egalitarian orientation to the same degree, this might be due to differences between Hofstede’s and GLOBE in the conceptualisation and operationalisation of the Power Distance construct (Hofstede, 2006).

Figure 22 shows a road sign in the country’s capital Wellington, which nicely reflects the deep-seated belief in fairness and equality.

¹ New Zealanders often refer to themselves as Kiwis.



Figure 22: Sign in Wellington, NZ

Kiwis are furthermore believed to be very inventive (Chaplin, 2009) and self-reliant, however, often fail to develop and market their inventions to successful innovations (NZTE, 2009), which might be attributed to the prevailing short-term orientation in NZ culture and a generally critical attitude toward big (and international) corporations (UMR, 2003).

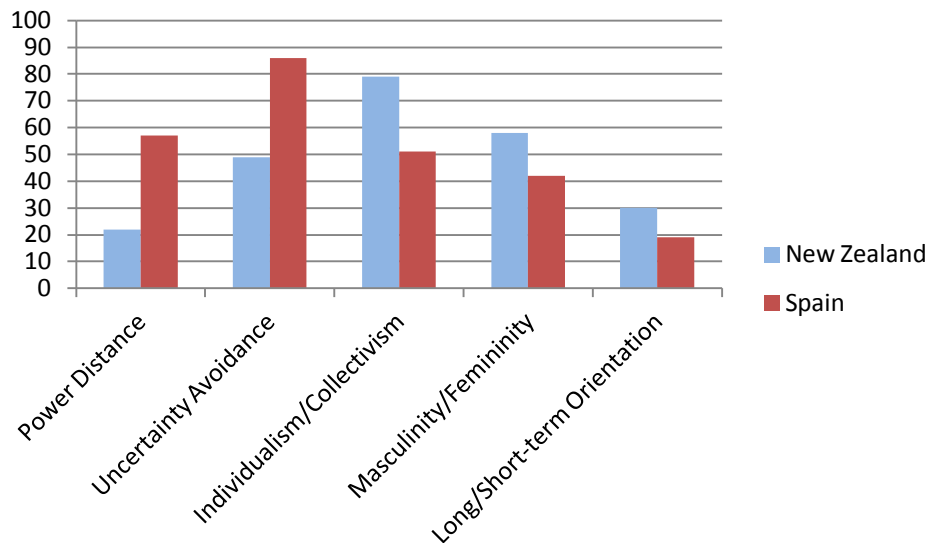


Figure 23: Comparison between NZ and Spain: Hofstede's cultural dimensions (Source: Hofstede, 2001)

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Past research has found that New Zealanders often highly value quality of life (UMR, 2003). Accordingly, typical Kiwi aspirations have been described colloquially as the three Bs: bach, boat and BMW (Chaplin, 2009).

In a recent report on the Kiwi culture and its impact on the competitiveness on NZ businesses, New Zealand Trade and Enterprise write self-critically:

Even though there is no lack of novelty, our inventiveness is dominated by practical, trial and error, incremental adaptation problem solving and process modifications using available resources and often borrowing” [sic] intellectual property (which we consider is okay because it is only for our own use) and thus immediately limiting commercial development. This is in effect the #8 gauge wire approach and in a pioneering world that was a nation-defining competitive advantage. In a world of increasing complexity and sophistication the do-it-yourself make-and-use practicality is increasingly a liability as it becomes a compromise make-doism” and that may be the basis of the reported she’ll be right attitude. (NZTE, 2009, p. 18)

6.2.2.2 Spain

While NZ’s scores of In-Group Collectivism rank among the lowest and its scores of Institutional Collectivism amongst the highest among all economically developed (Western) countries, the exact opposite is the case for Spain: Spain is a society in which ties within extended families and between friends are exceptionally strong for a Western society (O’Connell, et al., 2008). Likewise, in Hofstede’s original study (1980a), Spain resulted as the most collectivistic among the Latin European countries.

In the same connection, in their early landmark study Haire, Ghiselli and Porter (1966) found that Spanish managers had greatest preference for social needs, measured as the opportunity develop close friendships in the management position and give help to other people (p. 78), whereas they scored lowest on the need for self-actualization (p. 94).

Similar to other societies of the GLOBE Mediterranean cluster (Gupta & Hanges, 2004), the importance of social relationships in Spain and centrality of family is clearly reflected in a score of In-Group Collectivism that surpasses all other developed

Western countries in the GLOBE project (House, et al., 2004). In this context, O'Connell, et al. (2008) caution expatriates in Spain that "the high value given to In-Group Collectivism among societal cultural characteristics suggests that guest executives not be presumptuous too early about being accepted into the 'club'" (p. 651). In private life, mutual help between generations within a family is far more frequent than in other Western societies (Bazo, 2002), which further highlights the importance of the family as a societal institution in Spain.

Paradoxically, the Spanish score of *Institutional Collectivism* ranks amongst the lowest of all participant countries in the GLOBE project. This shows that collective action and distribution of resources within the society is a cultural value that is endorsed only to a limited extent.

Indeed, in a cultural guide to Spain, Meaney (2003) cites the nineteenth century English writer Richard Ford with the words "The Iberians never would amalgamate, never would... put their shields together – never would sacrifice their own local interest for the general good" and "the Spanish are an individualistic race. A Spaniard's loyalty is to his village or town first, then to his region, and finally, if at all, to his country" (p. 33). Rather critically, she writes further:

The Spanish have very little civic or public spirit, as you can judge from the litter they throw around, or, as another example, the low number of people who give blood. They do not like joining organizations (unless they involve sport). They will do whatever is necessary to further themselves, or their own families, but little or nothing to benefit their local community. (p. 58)

Although these statements might be exaggerated, it is safe to say that in comparison with other Western societies, in Spain social groups based on direct and personal relationships such as to close friends and family are more salient than abstract, depersonalised group affiliation (such as portrayed through nationality). However, there are also clearly individualistic features; for instance, "in the Hispanic culture, there must be room for initiative and pride in oneself in the job" (O'Connell, et al., 2008, p. 638).

Consequently Spanish culture has been labelled as either “individualistic” (Meaney, 2003) or “collectivistic” (Gouveia, de Albuquerque, Clemente, & Espinosa, 2002) by different authors. O’Connell (2008) explains further that “organizations and managers reflect a mix of individualistic and collectivistic features, probably reflective of the melange of cultural influences imported to Spain” (p. 634).

Interestingly, in Hofstede’s framework Japan and Spain have similar scores in terms of collectivism with 46 and 51, respectively. However, unlike Japan, where the collectivistic orientation often extends to organisations², in Spain the loyalty is primarily directed toward close friends and family. As one of the Spanish executives interviewed as part of the present study noted, Spanish people are the least “corporate” she is aware of. In other words, the collectivistic orientation does usually not stretch to work place relations.

In comparison with NZ, the society is less egalitarian and more hierarchically oriented, as reflected in a medium-high score of Power Distance in Hofstede’s (1980a, 2001) framework. In terms of the GLOBE framework the country mean score in Power Distance is in “A” band³ and therefore amongst the highest scores of the participating countries. According to Trompenaars and Hampden-Turner (1998), family is more important than personal achievement for status ascription in Spain.

6.2.3 NZ and Spain: A concluding comparison

NZ and Spain are not only literally located on opposite sides of the planet, but they also represent a strong contrast in terms of their societal cultures. Whereas NZ ranks amongst highest of Institutional, but lowest In-Group Collectivism with an egalitarian orientation, the situation is reversed in Spain, where In-Group Collectivism is paramount and Institutional Collectivism almost negligible, with a medium-high

² Hofstede and Peterson (2000) therefore call the Japanese collectivism “very unique” (p. 408).

³ Bands range from A to D (A>B>C>D). Societies in different bands are considered to differ significantly from one another (cp. Hanges, Dickson, & Sipe, 2004).

power differential. Thus the differences in societal culture between Spain and NZ are most marked on two cultural features: I-C and Power Distance, arguably two key dimensions of societal culture when it comes to the cultural fit of management practices (Erez, 2009, 2010).

Put another way, each of the two countries represents one facet of collectivism: NZ an egalitarian collectivism with “abstract, categorical group memberships,” (Brewer & Chen, 2007, p. 137), whereas in Spain social ties are more based on direct, personal interrelationships to friends and family.

Perhaps the strength and importance of interpersonal networks with unquestioning reciprocal loyalty contributes to a relative high level of corruption in Spain amongst the developed countries (28th place in the 2008 Corruption Perception Index (Zinnbauer, Dobson, & Despota, 2009)). NZ, in contrast, with its very low In-Group Collectivism and high Institutional Collectivism, holds the worldwide first place of the Corruption Perceptions Index by Transparency International (Zinnbauer, et al., 2009), indicating a very low degree of nepotism in NZ. It shares this first place with the two Scandinavian countries of Sweden and Denmark, both of which, like NZ, feature almost identical patterns of low In-Group and very high Institutional Collectivism (House, et al., 2004).

NZ culture highly endorses the “universalistic principle of fairness” (Yamagishi, Jin, & Miller, 1998, p. 326) where the term fairness stands for the disregard of group affiliation in favour of universal rules, whereas Spain can be better characterised by the “collectivist principle of in-group favoritism” (p. 326). Ingroup favouritism can be understood as the “preferential treatment of members of one’s own group and the discrimination against out-group members” (Yamagishi, et al., 1998, p. 315).

In terms of economic development, however, NZ and Spain present quite comparable conditions. In the latest published report of the International Monetary Fund (IMF, 2010) on the Gross Domestic Product per capita in current prices, NZ ranks on the 24th place with \$31,589 per capita, just one rank before Spain with \$28,975 per capita (IMF, 2010). The report of the World Bank presents a very similar picture (with

positions reversed) for 2009, where Spain and NZ are located closely on the 23rd with \$31,774 and 25th world-wide rank with \$29,000 per capita, respectively (World Bank, 2009).

The finding that Spain and NZ are currently on very similar levels in terms of economic development is important as it allows ignore developmental explanatory approaches such as underlying the convergence/divergence perspective (see Literature Review) for the interpretation of the case findings.

Moreover, normative beliefs about the centrality of work in both countries are similar: Preference is typically given to leisure time (Meaney, 2003; NZTE, 2009). Both countries are stable democracies, with freedom of expression being an inherent part of each society. This is essential when considering that openness on the part of the participants is crucial for the reliability of the findings. Without freedom of expression and the credible promise of anonymity for the participants it would be difficult to establish an atmosphere of trust and openness with the interviewees and workshop participants.

Furthermore, both Spain and NZ are low-context cultures (Trompenaars & Hampden-Turner, 1998) and thus typically feature direct communication styles, which are essential in interview situations, where the interviewer is an outsider and thus largely unaware of contextual nuances and implicit communication styles that are typical of high-context cultures.

6.3 Choice of Case Organisations

6.3.1 Toyota

6.3.1.1 Proficiency in CI

Toyota was instrumental in the development of many features that had a profound impact on today's OM theory (Schonberger, 2007; Sugimori, Kusunoki, Cho, & Uchikawa, 1977) and can arguably be considered well-advanced with regard to its operational capabilities (New, 2007). It has been named "the proverbial Lean leader" (Lillrank, 1995, p. 973). Although there have been critical voices with regard to

employee well-being (Boje, 1993; Mehri, 2006), the Toyota Production System (TPS) is also hailed the “enigma” of efficient operations (New, 2007). Liker, who wrote several books about Toyota, its corporate philosophy and production system, reported that “at Toyota, he felt he had at last found an organisation in which the social and technical systems were really integrated” (Liker & Meier, 2008, p. xvi).

Toyota has not only been known for exceptional levels of product quality and organisational effectiveness for decades. It has also been the inventor or at the forefront of the development of a multitude of CI-related organisational innovations such as kanban, JIT, TQM or Lean Production. Toyota earned wide recognition for establishing CI-oriented organisational cultures within Western societies, well outside its Japanese origin culture (e.g. P. S. Adler, Goldoftas, & Levine, 1997, 1999; Recht & Wilderom, 1998).

Despite product design issues that were widely debated in the media, prominent proponents of quality continue to adjudge Toyota unconditional competence and continued leadership in CI (Imai, 2010). In fact, Imai (2010) argued that it proofed Toyota’s superb operational capabilities to be able to deal with millions of recalls and variations in product demand flexibly. The Lean Institute NZ even asserts “this may well become a competitive advantage for Toyota. Toyota's actions are taken today from their recognition of their strength and not their weakness” (Lean Institute, 2010).

Summing up, Toyota has made in the past and still continues to make tremendous contributions to the development of the concept of CI.

6.3.1.2 The Toyota Way

The TW is a set of principles or values that underlie Toyota’s corporate philosophy. This section only serves to broadly outline the basic tenets of the TW as they will be relevant for the subsequent analysis.

Toyota’s corporate philosophy and its operational as well as organisational principles have been described in considerable detail elsewhere (Jayamaha, Wagner, Grigg,

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Campbell-Allen, & Harvie, 2011; Liker, 2004; Liker & Hoseus, 2008; Osono, Shimizu, Takeuchi, & Dorton, 2008; Sackmann, 2006; Spear, 2004; Spear & Bowen, 1999) and will not be repeated here.

Toyota strongly pursues the goal of disseminating its corporate philosophy worldwide (Toyota Motor Corporation, 2002) and has even established dedicated institutions within the organisation to coordinate this effort. In all cases of this study, the TW is followed to a high degree and plays a manifest role in everyday operations.

“Continuous Improvement” and “Respect for People” are at the core of Toyota’s corporate philosophy (see Figure 24). More specifically, it includes the following corporate values (Toyota Motor Corporation, 2002):

- *Challenge* is the call to use one’s creativity and courage to question the status quo, combined with a long-term perspective;
- *Kaizen* (“change for the better”) is the value to continuously innovate and improve existing operations;
- *Genchi Genbutsu* is about going to the source of problems and make fact-based decisions in consensus with the people involved;
- *Respect* is to “make every effort to understand each other, take responsibility and do our best to build mutual trust” (Toyota Motor Corporation, 2002, p. 3);
- *Teamwork* involves, along with effective collaboration, opportunities for personal development and professional growth.

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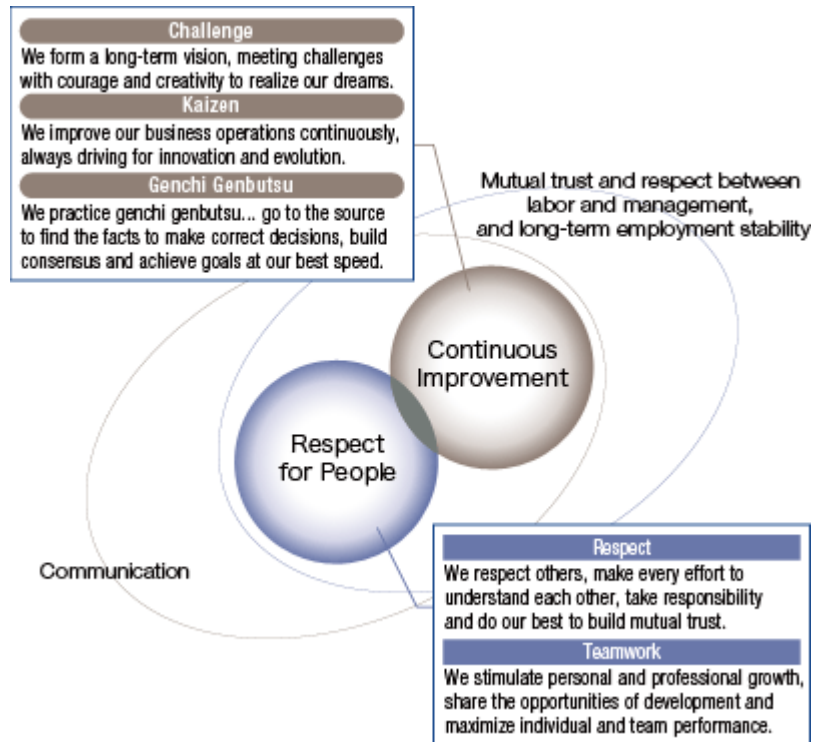


Figure 24: The Toyota Way 2001 (Source: Toyota Motor Corporation, 2011)

Toyota was identified as an ideal partner in this research because the TW can arguably be considered prototypical of a CI philosophy (Liker & Hoseus, 2008).

Moreover, the international structure of the organisation and homogeneous dissemination of the TW would permit the selection and substantial matching of suitable case studies in terms of the replication logic.

Toyota agreed to participate and exhibited an extraordinarily high level of cooperation and openness in this research project. The organisation also assisted in identifying work groups of particularly high CI performance and maturity. Moreover, it permitted an exceptional level of access to various sites and individuals at all levels of the organisation as well as company documentation over an extended period of time in all case studies. All participating sites were visited on multiple occasions, the total time on site ranging from several days to a number of weeks in some cases using repeated visits over several months, depending on practical considerations.

6.3.2 Multipueblo

Multipueblo (Pseudonym) is a multinational corporation with manufacturing sites in several countries around the world. It produces a wide range of consumer articles made from moulded plastics, most notably packaging components. The most notable difference in comparison to Toyota for the purpose of this study is the lack of encompassing corporate philosophy that is applied consistently at all sites. However, the participating site makes strong use of CI related tools and techniques, as will be explained in more detail later.

It could be argued that the fact that Multipueblo does not pertain to the automotive industry will result in industry-culture related effects that might distort the overall results of this study. However, several comprehensive previous studies could not find industry-related differences in organisational cultures, even between hugely distinct industries. For instance, the GLOBE project (House, et al., 2004) could not determine consistent and significant differences in organisational culture characteristics between organisations of financial services, food processing, and telecommunications industries. Similarly, Sousa-Poza and Nystrom and Wiebe (2001) did not find any significant differences in the organisational culture that was due to the industry type.

Instead, I argue, it is important to carefully examine the actual workgroup's characteristics such as discussed in Section 6.1.4.

6.4 Choice of Work Groups

6.4.1 Pairwise matching of cases for replication

In short, the replication design serves to compare different conditions and thus make the influence of organisational and societal culture observable. The logic is the same as the one of a scientific experiment (Yin, 2009): By emulating experimental conditions one can examine the role of different factors through juxtaposition.

Under the theoretical considerations and practical constraints explained in Sections 6.1.3 and 6.1.4 the case study concept as shown in Figure 25 was developed.

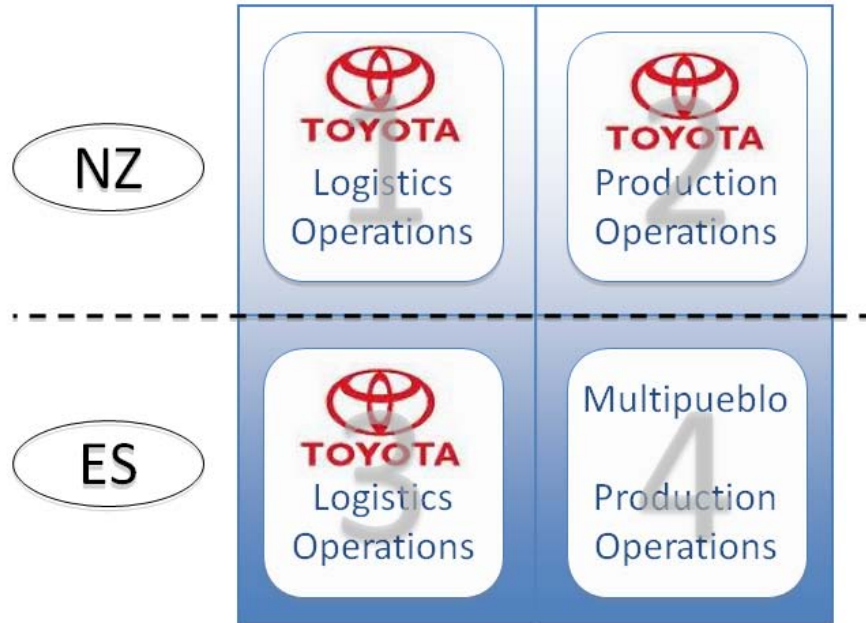


Figure 25: Multiple-case study design; with two cases located in New Zealand (NZ) in the first line and two cases located in Spain (ES) in the second line.

The selected cases (see Table 15) are substantially matched according to organisational characteristics within either similar or polar societal cultural settings, pursuing patterns of both literal and theoretical replication (Yin, 2009).

Table 15: Case study overview

| # | Case study | Acronym |
|---|--|---------|
| 1 | Toyota Parts Warehouse, Palmerston North, NZ | TPN |
| 2 | Toyota Vehicle Operations, Thames, NZ | TTH |
| 3 | Toyota Parts Warehouse, Madrid, Spain | TMD |
| 4 | Multipueblo Operations, Barcelona, Spain | MPB |

The array shown in Figure 25 is designed for pairwise cross-case analyses. It allows the observation of the consistent effect of the corporate philosophy between cases 1 and 2 (Figure 26; literal replication), while contrasting the effects of different corporate philosophies in the same socio-cultural setting between cases 3 and 4 (Figure 27; theoretical replication: contrasting results for predictable reasons).

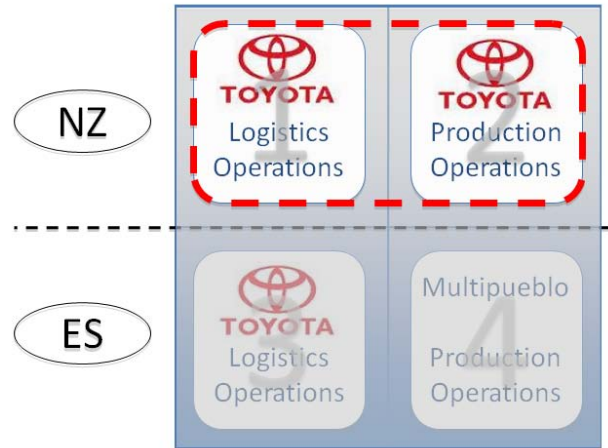


Figure 26: Literal replication: Expecting similar results in two different work groups of the same organisation located in the same socio-cultural context

In other words, the lower half of the replication design (see Figure 27) seeks to answer the question: In the same socio-cultural setting, what role does the corporate philosophy and other organisation-specific factors play?

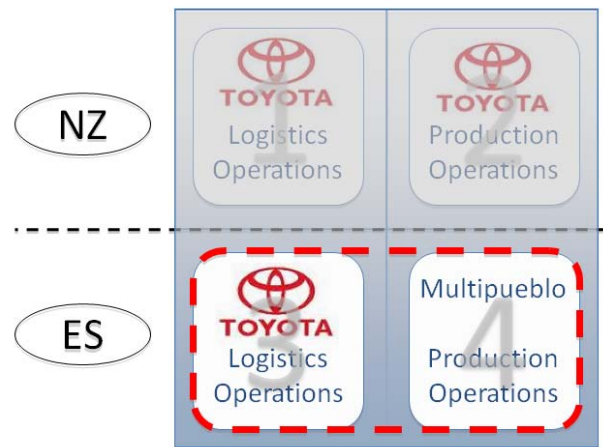


Figure 27: Theoretical replication: Expecting differing results in workgroups located in the same socio-cultural context but pertaining to organisations with dissimilar corporate philosophies

In terms of the societal culture, the design allows the literal replication between cases 1 and 2 (see Figure 26), and theoretical replication between cases 1 and 3 (the same corporate philosophy in contrasting societal contexts, see Figure 28). This part of the replication design tries to answer the question: What is the role of the socio-cultural environment when the corporate philosophy as well as group features such as industry, size and task characteristics are held constant?

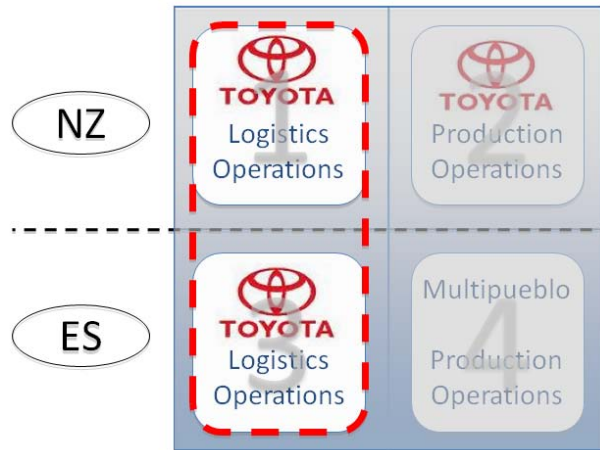


Figure 28: Theoretical replication: Expecting differing results in workgroups pertaining to the same organisation and corporate philosophies but located dissimilar socio-cultural contexts.

A theoretical replication between cases 2 and 4 (see Figure 29) is more constrained. Although the two cases exhibit similar operational characteristics, they pertain to different organisations and are moreover located in different socio-cultural contexts, a fact which restricts meaningful comparisons. However, drawing on insights from the other parts of the replication design may enable a meaningful cross-case analysis between cases 2 and 4 as well.

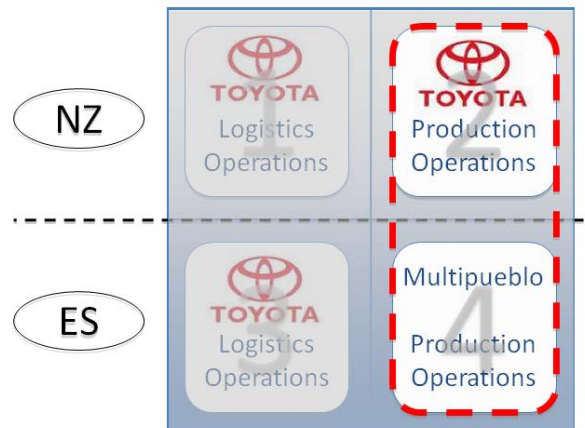


Figure 29: Theoretical replication: Expecting differing results for predictable reasons in workgroups pertaining to different organisations and located in different societal contexts

It is important to note that the aim of this study is not to prove or refute differences between NZ and Spanish societal cultures. The multiple-case study design of purposefully (as opposed to randomly) selected cases was never designed to be

representative or to allow inferences to a wider population. The existence of cultural differences between Spain and NZ is already known from previous studies (for instance, Hofstede, 1980a; House, et al., 2004; Kennedy, 2008; O'Connell, et al., 2008) and – from a contingency theoretical perspective – it is clear that there are likely to be differences in OM/QM practices as well (R. Sousa & Voss, 2008). These cases were selected precisely *because* the existence of differences is known. The carefully matched cases permit to observe and juxtapose the effect of two different factors – organisational affiliation and societal context – independently. Statistical generalisation is replaced by theoretical generalisation across the cases; logic takes the place of probability (Yin, 2009).

6.4.2 Work group baseline descriptions

6.4.2.1 Toyota Parts Warehouse, New Zealand

The logics centre that formed the case study Toyota Palmerston North (TPN) is part of the Toyota National Customer Centre and supplies all Toyota and Daihatsu dealers and workshops in NZ with spare parts and other articles. The National Customer Centre is located in Palmerston North, the principal city of the Manawatu-Wanganui region. It is NZ's seventh largest town with about 80,000 inhabitants. It is located about 140km north of the country's capital Wellington, centrally in the lower part of the North Island, which makes it a favourable and popular location for logistic centres in NZ.

Incoming parts arrive largely via containers from either from Japan or Australia. The operations involve a process chain of several subsequent tasks of clearing and unloading incoming containers, sorting and binning the merchandise into the designated locations in the warehouse, as well as picking and packaging orders. The items range in size from very small items such as screws to large body panels or windscreens. The dispatch of outgoing parcels is performed in-house through a close cooperation with a nationwide parcel-service, Poste Haste.

6.4.2.2 Toyota Vehicle Operations, New Zealand

Thames is a small town located at the Firth of Thames, little more than a hundred kilometres from the country's largest city, Auckland. Located at the southern end of the Coromandel peninsula and offers a large variety of sporting and outdoor activities (Thames Info, 2011).

Until 1998, Toyota assembled a variety of different models in NZ in order to avoid substantial tariffs on vehicles imports to NZ. When the NZ government abolished these tariffs in 1998, Toyota, like other manufacturers, decided to stop local assembly in NZ. In early 1999, the Thames plant was re-opened as a refurbishment centre of used vehicles from Japan for resale in NZ. Toyota New Zealand (TNZ) explains on its website:

TNZ imports used Toyotas purchased in Japan and certifies them to specific standards at its Thames Vehicle Operations Centre. Ex-lease Toyotas originally sold new in New Zealand are refurbished at Thames and sold as Signature Class. Toyota vehicles from both sources are then re-marketed under the Signature Class brand. (Toyota New Zealand, 2010a)

The workforce and union affiliation in today's refurbishment plant are largely inherited from the assembly days, although the total number of staff is with about 55 only a fraction of the plant's former size of more than 300 staff. The refurbishment operation involves substantial tests and mechanical work, but the most significant amount of work is concerned with bodywork.

The plant is organised as a sequence of loosely coupled work stations with queues of vehicles as buffers in-between. Because all vehicles are fit to drive from station to station, there is no need for any conveyor equipment in the plant.

The vehicles enter the plant through a wash bay, are thoroughly visibly evaluated in the next station and mechanically checked and serviced in the following. Then the vehicles enter the body shop where several panel beaters remove dents and do other bodywork. In the following stations the vehicles are prepared for priming and

painting (sanding of panels, removal of antennas, door handles etc. and masking of windows and other intact panels). This is followed by the priming and spray painting of the prepared panels. In the subsequent “Finishing” station imperfections in the paintwork are identified and removed. In the next “Finishing” station any removed parts (door handles etc.) are reassembled and the vehicle is thoroughly cleaned on the inside. Finally, the last station is concerned with an inspection of the vehicle as well as photos that are taken for Toyota dealers and potential buyers.

The work group that formed the Toyota Thames (TTH) case study includes the stations of panel beating, prime preparation, finishing and final inspection and is lead by one of the team captains⁴.

6.4.2.3 Toyota Parts Warehouse, Spain

Similar to the situation in NZ, the principal logistics centre of Toyota in Spain is located in a country town in the proximity of the capital: The depot in San Agustín de Guadelix is located centrally in Spain, about 40km north of Madrid. San Agustín de Guadelix is a town with a population of about 12.000 inhabitants.

Like TPN, the operations at Toyota Madrid (TMD) involve a process chain of several subsequent semi-manual tasks of sorting, binning, picking, packaging and dispatching items ranging widely in size. However, as opposed to TPN, where picking of orders is performed through visual comparison of the product code and a picking list, at TMD these tasks are performed with the help of hand-held bar code scanners that are radio-linked to a central computer server that is used to verify merchandise. In TMD, most merchandise is delivered via road from Toyota Europe’s central logistics centre in Belgium.

Another difference between TPN and TMD is the use of cross-dock dispatching: While in TPN all merchandise is binned in the warehouse before picking and dispatching, in

⁴ ‘Team captain’ is the term used at TTH for the hierarchical position of team leaders, as will be explained later.

TMD merchandise for which there is already a dealer order in the IT system, the merchandise bypasses the binning process and is prepared for dispatch right after arrival at the dock – hence “cross-dock”. In contrast to New Zealand, the dealer structure and comparatively large order quantities in Spain make the cross-dock process cost-efficient. Moreover, the radio-linked bar code scanners permit the allocation of merchandise to orders within the warehouse in real-time.

Like in TPN, a central characteristic of the binning and picking is the high degree of task interdependence: merchandise needs to be placed in containers (such as trays, crates or boxes) in specific ways that are ergonomically convenient, clearly visible, accessible and safe for workers doing the consecutive task.

The fieldwork in this case study was conducted in the same sequence of steps as the remaining case studies. The only difference, however, was that the group workshop could not take place due to resource restrictions on the part of the organisation. Moreover, the number of interviews and survey responses was considerably smaller than in the other cases.

6.4.2.4 Multipueblo Manufacturing, Spain

Multipueblo Barcelona (MBP) is part of a factory that is located in the outskirts of the second biggest city of Spain, Barcelona. The metropolis of Barcelona and its suburbs pertains to the autonomous community of Catalonia⁵.

⁵ While the TMD is located in central Spain, MPB is in Catalonia. Some attribute the inhabitants of the Catalonia region a distinctly "*mercantile mentality*" (O'Connell, et al., 2008, p. 625). However, like other studies before (e.g., Gouveia, et al., 2002), this study is based on the assumption that between-country differences (Spain and NZ) outweigh between-region differences within Spain. Furthermore, as a result of extensive migration movements within Spain, much of the workforce at MPB has cultural roots outside of Catalonia in the rest of Spain. Therefore it is not surprising that the day-to-day work language at MPB is mainly Castilian (Spanish) as opposed to the local language Catalan. A majority of people, however, would understand spoken and written Catalan due to the linguistic proximity to Castilian. In conclusion, it seems a reasonable approximation to assume substantial cultural homogeneity in the socio-cultural context with regard to the two case studies located in Spain.

Similar to the work group studied in the TTH manufacturing plant, the work group studied at Multipueblo comprises a sequence of functions with strong task interdependence: injection moulding, parts assembly operations and machine maintenance. This is important as the high dependency between the subsequent tasks creates the need to cooperate within the group.

MPB has a long history of CI in terms of ISO certification. It is certified to both ISO 9001 and 14001 since 2000 and is currently certified to ISO9001:2008 and ISO14.000:2004. In 2003, a comprehensive intervention of CI was introduced with a focus on Total Productive Maintenance (TPM). This CI programme included 5S on the entire shop floor.

The automotive industry is at the forefront of CI dissemination in Spain (Albors & Hervas, 2007) and is an important industrial sector in the Catalonia region. Not least because several MPB managers and workforce were formerly employed in the automotive industry, the level of awareness of and competence in CI at MPB can be deemed rather high.

6.4.3 Comparison of work group characteristics

6.4.3.1 Demographic and organisational characteristics

In this section I will provide descriptors of the differences and commonalities between the work groups. These should be treated as an important ingredient toward a holistic understanding of each case. Table 16 lists the basic organisational characteristics of the work groups, while Table 17 summarises demographic information obtained through the survey.

Table 16: Organisational characteristics of work groups

| | TPN | TTH | TMD | MPB |
|---|--|--|--|--|
| Work group size (approx⁶. full-time equivalent) | 18 | 16 | 18 | 18 |
| Number of participants | 15 | 16 | 7 | 18 |
| Industry | Automotive | Automotive | Automotive | Consumer articles |
| Operation type | Logistics | Production | Logistics | Production |
| Capital and labour intensity (in comparison) | Low capital and medium labour intensity | Medium capital and medium labour intensity | Low capital and medium labour intensity | Medium capital and medium labour intensity |
| for profit/ non-profit | For profit | For profit | For profit | For profit |
| private/ public sector | Private sector | Private sector | Private sector | Private sector |
| Socio-cultural environment | Small town in the vicinity of the country's capital city | Rural town in the vicinity of the country's major city | Small Town in the vicinity of the country's capital city | Small town in the suburban area of one of the country's major cities |
| Cultural origin of leaders within workgroups | local | local | local | local |

Table 17 shows that the average age of group members of the Spanish work groups is lower (see also footnote), whereas the average length of education is longer.

⁶ The headcount includes part-time or temporary workers.

Table 17: Demographic information obtained from the organisational survey

| | | TPN | | TTH | | TMD ⁷ | | MPB | |
|---|---------------|------------|------------------|-------------|-----|------------------|----|------------|-----|
| Number of valid survey responses | | 13 | | 16 | | 2 | | 18 | |
| Average age | | 49.9 years | | 44.2 years | | 38 years | | 36.8 years | |
| Male | Female | 77% | 15% ⁸ | 56% | 44% | 100% | 0% | 72% | 28% |
| Average tenure | | 9.7 years | | 13 years | | 3 years | | 9.4 years | |
| Years of education | | 10.9 years | | 11.25 years | | 18 years | | 15.3 years | |

6.4.3.2 Hierarchical structure

While job titles differed from case to case, information given by respondents about their position within the organisation helped to classify responses into hierarchical levels. Four classes common to all case studies are:

- Frontline worker
- Team leader
- Lower management
- Upper management⁹

⁷ While the survey covered virtually all group members in the case studies TPN, TTH and MPB, the number of valid survey responses at TTH was only n=2 due to constraints on part of the organisation. Therefore the comparability in terms of the demographic information is limited. However, from the organisational observations I estimate the actual average age of the work group members at TMD to be around 45-55 years.

⁸ Percentages may not add up to 100% due to missing values

⁹ Strictly speaking upper managers and executives were not part of the work groups but were interviewed for contextual information.

These classes were entered in NVivo as case attributes to allow for more specific queries. Table 18 delineates the hierarchical structure of the work groups as part of the wider organisational units.

Table 18: Comparison of hierarchical structure of work groups

| | TPN | TTH | TMD | MPB |
|---|---|---------------------------|--|--|
| Total number of hierarchical levels in organisational unit in which work group is located. | 5 | 4 | 4 | 4 |
| Number of hierarchical level in work group | 3 | 2 | 3 | 3 |
| Hierarchical structure within work group (using native job titles) | 1 (main) team leader, 3 team leaders, workforce | 1 team captain, workforce | 3 area managers, 2 team leaders, workforce | 2 area managers, 6 team leaders, workforce |
| Degree of autonomy in decision-making of workgroup within organisational unit | Medium-high | Medium-high | Medium-high | Medium |

While the NZ-based work groups have a relatively “flat” organisation chart, the Spanish work groups are more hierarchically structured.

6.4.3.3 Task characteristics

As Table 19 shows, all cases have in common that the work group performs sequence of highly interlinked tasks and otherwise very similar characteristics. This task interdependence, or the “degree to which an individual’s task performance depends on the efforts or skills of others” (Wageman and Baker 2009, as cited in Bendoly, Croson, Goncalves, & Schultz, 2010, p. 441) results in a strong need for interaction and cooperation between co-workers.

Table 19: Task characteristics and dynamics of work environment

| | TPN | TTH | TMD | MPB |
|---|-------------------|--------------------------|-------------------|--------------------------|
| Task variety | Medium-low | Medium-low | Medium-low | Medium-low |
| Task complexity | Medium-low | Medium | Medium-low | Medium |
| Task interdependence | High | High | High | High |
| Outcome interdependence | Medium-high | High | Medium-high | High |
| Distance between regular workplaces | Medium-Close | Distant | Medium-Close | Distant |
| Repetitiveness | Highly repetitive | Medium-highly repetitive | Highly repetitive | Medium-highly repetitive |
| Technological requirements | Low | Low | Medium-low | Medium-low |
| Variability of demands | High | High | High | High |
| Frequency of changes in operations environment | Medium | Medium | Medium | Medium |

The outcome interdependence was on a high level in all work groups, however, it can be deemed slightly higher in the logistics operations due to the traceability of errors to individual workers.

6.4.3.4 Features of work groups that facilitate fieldwork

The case studies had several additional benefits that should not go unmentioned:

- None of the visited sites featured any exceedingly sensitive organisational or technical information, which eliminated the need for organisational secrecy and thus hugely facilitated unhindered fieldwork.
- Openness and contribution to the local communities is part of Toyota’s corporate philosophy (Toyota Motor Corporation, 2002) – a fact that itself facilitated gaining access.
- The participating manufacturing sites were organised in flexible production cells. Unlike a continuous flow assembly line, subsequent tasks are not directly

linked time-wise and therefore permit a certain amount of time for interviews or on-the-job discussions without interrupting the production.

- Similarly, the nature of the participating logistics operations permitted group members to give interviews during working time without interrupting operations.
- Relatively straight-forward and well-documented operations as well as the use of widely known organisational tools in all cases allowed the research to focus on the groups' cultures, without being obstructed by issues unrelated to the purposes of the study.

6.4.4 Data collection period

6.4.4.1 Time period

After concluding the pilot case study, the main case studies as described above were conducted in sequence between October 2009 and May 2010. It is important to note that the data collection period coincided with a time of worldwide economic turmoil after the near breakdown of the financial markets. A collapse in worldwide demands concurred with – in the case of Toyota – several large product recalls that led to an unparalleled crisis in the recent company history. While this crisis put an enormous strain on all participating organisations, this has positive implications for the validity of this study: As Schein (1985) asserts, the “true” culture of an organisation emerges most clearly when it faces a crisis.

6.4.4.2 Field visits

In an initial meeting in each case study, I explained the project to the employees and invited them to participate. I handed out information sheets stating the purpose and methods used in the study as well as the rights of the participants. Likewise, consent forms were handed out and collected afterwards.

In all cases, I was provided with office space to conduct interviews and interim analyses of the data in privacy.

Raw data from each case consists of field notes from on-site periods covering direct and participant observations, relevant documents from the organisation, digital recordings of interviews, on-the-job discussions and the workshop, interview notes, and digital pictures of the site and the workshop.

6.4.4.3 Achieving in-depth access

Gaining in-depth access to suitable and carefully matched cases was one of the key attainments in this research project. Although the structure of this thesis might suggest otherwise, it was anything but an easy, swift or linear task – especially in the middle of an economic crisis. In this connection O’Connell (2008) noted fittingly, “patience with the niceties of social research is a scarce commodity in Spain” (p. 636).

It was preceded by an extensive phase of scanning candidate cases and soliciting participation of organisations and individual sites.

In case of both participating organisations, access was eventually facilitated through a high profile contact person within the organisations. However, in none of the cases was monetary compensation for participation provided.

A written statement with the participating organisations was communicated that detailed the researcher’s involvement and the feedback that was going to be provided to both individuals and the organisation. The researcher’s role was agreed as that of an observer, i.e. to learn about the company culture, and not that of a consultant, i.e. to make suggestions for changes.

Across all case studies, group members were invited to participate during working time. Apart from information about the study’s outcomes, no additional incentives such as payments to individuals were offered.

6.5 Chapter Summary

This chapter worked to explain the multiple-case design and its underlying replication logic. The work groups were chosen to pertain to two different multinational organisations and located in contrasting socio-cultural settings.

Chapter 6: Case Study Design and Selection

The I-C dimension of culture reflects a core aspect of cultural variation between societies. The chosen societal contexts for this study – Spain and NZ – occupy polar positions on this dimension amongst Western countries. Spain and NZ are developed economically to a very similar level, but the way each society is knit is very different. Both Hofstede’s study and the recent GLOBE project confirm this contrast.

The main multinational organisation that was chosen and agreed to participate in this research is Toyota – a better example to study CI would have been hard to find. In addition to a pilot case study a total of four cases were selected: two logistics and two manufacturing workgroups. They are located in the two different socio-cultural settings, but exhibit otherwise very comparable organisational characteristics.

The maximisation of between-case homogeneity in these characteristics ensures that observed differences are due to variations in the groups’ cultures, and not due to random variations in other properties.

The result is a set of four carefully matched case studies that allow a pairwise cross-case analysis to pursue different replication patterns and attain a rigorous comparison of the role of societal and organisational factors for CI, the results of which will be presented in the next chapter.

7. Results

Understanding an organization's culture is puzzle work, not problem solving. It takes tenacious attention to concrete phenomena, interpretive honesty, and a pluralistic conceptual sensitivity.

(Lundberg, 1985, p. 360)

7.0 Introduction and Overview

Moving from theory to practice, this chapter summarises the empirical findings. It presents and analyses the key meanings that constitute the group cultures of CI that were explored as case studies.

The structure of this chapter reflects the concept of duality of culture that was introduced and discussed in Chapter 4.2: If meanings are the result of both internalised values and social processes, then it is necessary to view meaning-making in the light of both self-concept and the group contexts in which it takes place.

Therefore this chapter begins with the individual level results in terms of the self-concept and individual attribution of meaning and continues with a cross-case comparison of culture-shaping practices. With the group cultures "thrown into relief by the contrast between different settings and groups" (Louis, 1985, p. 91), the scene is set to proceed to the discussion of the cultural paradigm of each group. This chapter concludes with a characterisation of the underlying key meanings and their significance for the group cultures.

In most sections quantitative comparisons will be presented together with supporting qualitative evidence. By providing examples of quotes from interviews and the group workshops I intend to illustrate general themes. The aim is to balance the vividness and explanatory power of quantitative charts with the richness and authenticity of qualitative reports in order to provide the reader with a holistic view of the cultural scenes. In presenting the data I have changed details that might give clues about the participants' identity in order to preserve their anonymity.

7.1 Individual Level Analysis: Self-Concept and Attribution of Meanings

This section draws the connection between the self-concept and meanings individuals ascribed to CI practices and concepts. I will first present the results of the TST. The second subsection explains the meanings the interviewees attributed to CI, how they are linked to the self-concept and how this differs across cases.

7.1.1 Between-case differences in the salience of different selves

The TST was conducted at the outset of each full-length interview across all case studies. None of the interviewees that took part in the TST indicated that they were aware of the test procedure or its analysis criteria.

Table 20 shows the arithmetic means of the individual results in all four case studies after correction of idiomatic measurement difference that is discussed in Appendix G.

Table 20: Final results of the TST across case studies

| Case | Number of interviewees | Salience of self-construal | | | Total |
|------|------------------------|----------------------------|---------------|---------------|----------------|
| | | personal | relational | collective | |
| TPN | 9 | 63,30% | 21,09% | 15,61% | 100,00% |
| TTH | 10 | 64,05% | 19,70% | 16,25% | 100,00% |
| TMD | 2 | 59,29% | 35,71% | 5,00% | 100,00% |
| MPB | 9 | 76,91% | 14,52% | 8,58% | 100,00% |
| All | 30 | 67.37% | 19.63% | 13.01% | 100,00% |

As illustrated in Figure 30, the NZ case studies Toyota Palmerston North (TPN) and Toyota Thames (TTH) are very similar in terms of the salience of the different selves, while in Multipueblo Barcelona (MPB) the personal self-construal is remarkably more salient, mainly at the expense of the collective self. The results of Toyota Madrid (TMD) should be viewed with caution due to the small number of interviewees, as explained in Section 6.4.3.1.

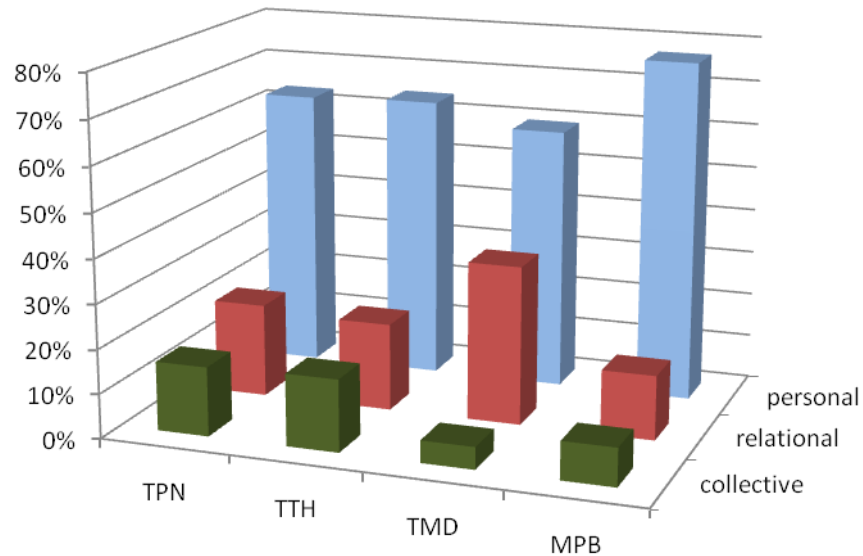


Figure 30: Salience of different selves in all four case studies

7.1.2 Individual reinterpretations: Attribution of additional meanings

This section is concerned with one class of meanings that emerged in virtually all open-ended-interviews and will be referred to as reinterpretations.

7.1.2.1 Categorizing meanings

As part of the interview prompt (see Appendix D), the interviewees are asked to explain the meaning of one or several CI-related concepts from their own perspective. Depending on the course of the interview, these concepts can be CI itself, Kaizen, or the TW. This is done when one of these concepts are brought up by the interviewee herself in order not to interrupt the flow of the interview. In some interviews the interviewees describe what these concepts meant to them on their own initiative, in which case the question in the interview protocol is redundant. Some interviewees gave immediately obvious meanings, such as “improve things continuously” or “what we are doing here – putting things into forms” in the case of CI or “the way Toyota does things” in the case of the TW.

More often than not, however, the meanings interviewees ascribe go well beyond the immediately obvious: *Reinterpretations* represent instances in interviews where interviewees explicitly attributed a meaning to CI or a related concept that extends

Chapter 7: Results

beyond trivial “book knowledge” (for examples see Table 21).

These reinterpretations are expression of the individual’s meaning-making in relation to CI and are paramount for the aim of this study. While many of these reinterpretations are idiosyncratic, i.e. the particular meaning was only attributed by a single interviewee, others were more common. After the coding of all interview data, a pattern emerged in these reinterpretations. A notable distinction can be made between:

- Relationship-oriented reinterpretations: Meanings that include a social component or social reference to other group members (left-hand side in Table 21).
- Non-relationship-oriented reinterpretations: Meanings that do not include a social referent (right-hand side in Table 21). The majority of these meanings were purely “technical” in nature such as “CI is a means to improve customer satisfaction”.

Accordingly, reinterpretations can be classified into two mutually exclusive categories; these distinct categories are defined as distinct sets in NVivo for subsequent analyses: Relationship-oriented and non-relationship-oriented reinterpretations.

Chapter 7: Results

Table 21: Relationship-oriented and non-relationship-oriented reinterpretations

| Relationship-oriented reinterpretations | Non-relationship-oriented reinterpretations |
|--|---|
| CI (SIS) viewed as a means to decrease tensions and resolve problems between workforce and management fast | The Toyota Way viewed as taking problems seriously to prevent damage down the line |
| CI (TPM) viewed as respect for hierarchy and being disciplined | The Toyota Way viewed as breaking problems down into manageable bits |
| CI viewed as being listened to by leaders | CI viewed as cleanliness |
| CI viewed as communication (between departments) with the right attitude | CI viewed as feeling responsibility for means of production |
| CI viewed as getting everybody involved | CI viewed as continuous progress |
| CI viewed as means to improve work in a team | CI viewed as conformance to requirements |
| Kaizen viewed as continuous improvement of interpersonal relations | CI viewed as improving efficiency, productivity and safety |
| Kaizen viewed as “unifying principle” for the group | CI viewed as keeping means of production in good conditions |
| Kaizen means that staff is getting the credit for improvements and not your boss | CI viewed as maintaining a good image toward the customer |
| Respect viewed as believing what the other person tells you (as a leader) | The Toyota Way viewed as work ethics & professionalism |
| Respect viewed as taking work seriously because of the next person in the line | The Toyota Way viewed as everybody does her own bit |
| The Toyota Way viewed as taking responsibility viewed as a leader from within the team | Control (-board) viewed as an enabler of personal autonomy |
| The Toyota Way viewed as a means to reduce social distance | Kaizen (CI) viewed as opportunity to use own creativity |
| The Toyota Way viewed as taking problems seriously to prevent damage down the line (for other people) | CI viewed as being systematic |
| The Toyota Way viewed as working together with mutual respect | Picking cassette viewed as helping to find a rhythm |
| The Toyota Way to help people have the same goals | CI viewed as getting input in one's own job |
| The Toyota Way viewed as showing real interest in individuals | TPM viewed as improving or solving problems and thus “making the means of production one's own” |
| The Toyota Way viewed as “talking straight” to people | The Toyota Way viewed as an opportunity for individual self-improvement |
| Respect is viewed as getting along with the team | CI viewed as believing in that things can be improved |
| | The Toyota Way viewed as common sense |
| | CI viewed as continuous work load without overload |
| | The Toyota Way viewed as fairness |
| | The Toyota Way viewed as stability |
| | PDCA viewed as providing autonomy for action |
| | CI viewed as means to make life easier |
| | The Toyota Way is part of one's way of life |
| | The Toyota Way or CI like running an own business |
| | CI viewed as having a quality orientation |

7.1.2.2 Linking the data sources: The self and reinterpretations

In this section I investigate whether the linkages between one's self-concept and the ascription of meaning to CI are consistent with the conceptualisation of culture in this study.

Although the distinction between the relational and collective self (Brewer & Chen, 2007) is highly useful on a conceptual level, it is less suitable for the purposes of this empirical investigation. With an overall small number of participants and the salience of collective and relational both being relatively low, the differences between relational and collective selves do not emerge clearly on the individual level so that meaningful results based on this distinction are difficult to obtain.

Therefore I decided to base the analysis on the personal self-construal only. As follows from the definition, the relational self ($x_{i,relational}$) is simply the mathematical complement of the relational ($x_{i,relational}$) and collective self ($x_{i,collective}$).

$$x_{i,personal} = 1 - (x_{i,relational} + x_{i,collective})$$

In order to control for differences in the length of the semi-structured and open-ended interviews¹ I investigated the meanings in terms of the ratio between relationship-oriented and non-relationship-oriented meanings using an NVivo matrix query².

¹ And to control for the different number of meaning units in each class as a function of the levels of the personal self-construal across all interviewees.

² NVivo allows display query results in different output formats. The most relevant for the given purpose is the amount of coding references; using coding references in NVivo yields the number of coherent data blocks that match the coding criteria used in the query.

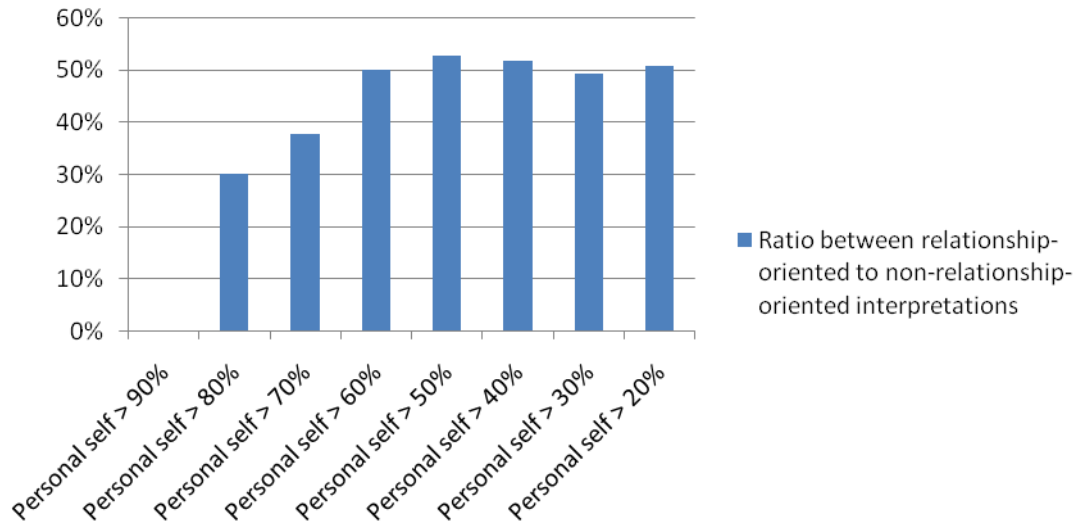


Figure 31: Ratio between relationship-oriented and non-relationship-oriented reinterpretations as a function of the personal self of participants across all cases.

As Figure 31 shows, when disregarding the case study affiliation, interviewees with a higher personal self-construal tend to attribute relatively fewer relationship-oriented meanings to practices and concepts of CI, compared to non-relationship-oriented meanings. The difference is most drastic in salience of the personal self between 60% and 80%, and levels off at values of the personal self smaller than 50%. This is the case no matter whether the NVivo output format is based on the number of sources coded, the number of cases coded or number of coding references.

Consistent with these findings, people with a very high score of the personal self-construal produce hardly any relationship-oriented meanings. On the other hand, people with a less salient personal self-construal produce both relationship- *and* non-relationship-oriented-meanings.

In this context it is also important to note that many interviewees who did not attribute any reinterpretations to CI or related concepts did not experience their workplace as meaningful and uttered considerable frustration about working with the organisation. Furthermore, people who ascribe relationship-oriented meanings also attach non-relationship meanings³, but not the other way around – people who

³ With one exception, as can be seen in Figure 33.

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ascribe non-relationship-oriented meanings to CI do not necessarily attach relationship-oriented meanings, too (see Figure 32).

| Interviewee | Relationship-oriented | Non-relationship-oriented |
|-------------|-----------------------|---------------------------|
| 1 | Yes | Yes |
| 2 | No | Yes |
| 3 | Yes | Yes |
| 4 | No | Yes |
| 5 | No | Yes |
| 6 | Yes | Yes |
| 7 | No | Yes |
| 8 | No | Yes |
| 9 | No | No |
| 10 | Yes | Yes |
| 11 | Yes | Yes |
| 12 | No | Yes |
| 13 | Yes | Yes |
| 14 | Yes | Yes |
| 15 | Yes | Yes |
| 16 | Yes | No |
| 17 | Yes | Yes |
| 18 | Yes | Yes |
| 19 | No | No |
| 20 | No | Yes |
| 21 | Yes | Yes |
| 22 | No | Yes |
| 23 | No | Yes |
| 24 | No | No |
| 25 | No | Yes |
| 26 | No | No |
| 27 | No | Yes |
| 28 | Yes | Yes |
| 29 | No | No |
| 30 | Yes | Yes |

Figure 32: Coding presence of relationship- versus non-relationship reinterpretations by participants

7.1.2.3 A rival explanation: Tenure and reinterpretations

When investigating attribution of meanings, another explanation is possible in addition to the self-concept: People who attribute relatively more relationship-oriented meanings have often in common a prolonged tenure in the organisation (see Figure 33), which indicates that the ascription of relationship-oriented meanings should be viewed in the light of the organisational enculturation process.

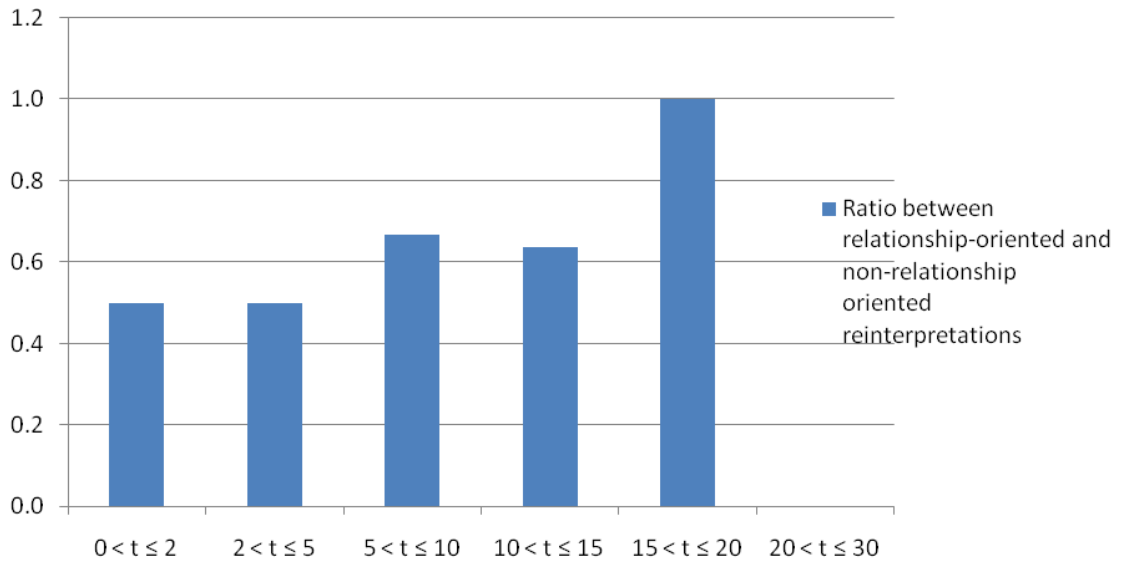


Figure 33: Ratio between relationship oriented and non-relationship oriented reinterpretations as a function of interviewee tenure (across all cases)

On the other hand, the pattern is less clear for extended tenures of more than twenty years, where the proportion of relationship oriented meanings drops to zero. This may, however, be due to the low number of interviewees with very long job tenures. These findings indicate the importance of organisational context, which follow next.

7.1.2.4 Differences between work groups

I calculated the arithmetic mean of the ratio between the relationship-oriented meanings and the total amount of reinterpretations per interviewee (relationship-oriented and non-relationship-oriented meanings⁴) on a case-by-case basis.

In addition, I examined whether there are differences between interviewees with a highly salient personal self-construal as opposed to interviewees with a low personal self-construal (see Table 22). Since the change in the ratio of reinterpretations seem to be strongest at a personal self of between 60% and 80% (see Figure 31), I divided

⁴ In order to avoid division by zero, interviewees where the total number of reinterpretations was zero were excluded from the analysis.

the interviewees of each case study in two groups at the threshold of 70% and looked at the implications in terms of the reinterpretations.

Table 22: Ratio between relationship-oriented and total number of reinterpretations case by case and for salience of the personal self higher and lower than 70% (coding references)

| Case | Ratio between relationship-oriented and total number of reinterpretations | | All interviewees |
|------------------|---|-----------------------|------------------|
| | personal self \leq 70% | personal self $>$ 70% | |
| TPN | 31% | 28% | 30% |
| TTH | 40% | 0% ⁵ | 29% |
| TMD ⁶ | 50% | 46% | 48% |
| MPB | 13% | 13% | 13% |

Table 22 should be interpreted with caution due to the small amount of interviewees in each group; however there seem to be considerable differences between the cases. Consistent with the previous findings, the ratio of relationship-oriented reinterpretations to the total number of reinterpretations is consistently equal or higher for a lower salience of the personal self, but there is a considerable difference between the work groups: While in all Toyota cases the ratio between relationship-oriented and total number of reinterpretations is around 30% or higher, interviewees at MPB show on average a markedly lower propensity (13%) to attribute relationship-oriented meanings to concepts of CI, irrespective of the salience of the personal self.

Put another way, even people with a lower personal at MPB tended not to include a social reference in the meanings that they attribute to CI concepts and practices. On the other hand, the proportion of relationship-oriented reinterpretations of employees at the Toyota cases TPN, TTH and TMD is considerably higher, and tends to be higher with a lower salience of the personal self. Other patterns across the

⁵ No interviewees in this class with relationship-oriented reinterpretations

⁶ Again, values from TMD should be treated with extreme caution as the number of interviewees was very small and pre-selected by local management.

individual meanings compliment this picture, which are presented in more detail in Appendix J.

This suggests that there may be significant differences in the organisational (cultural) contexts between the case studies that facilitate the attribution certain meanings over others. Therefore I will proceed to compare the work group contexts in the next section in order to discern the conditions that enable people to develop different meanings in relation to CI.

It should be highlighted once more that this analysis should be understood not as a statistical test that intends to draw conclusions about a wider population from a randomly selected sample, but as an attempt to locate patterns between the cases that facilitate the further analysis.

7.2 Cross-Case Comparison of Culture-Shaping Practices

Having discerned considerable differences in the individual attribution of meaning between the work groups, it is now appropriate to move on to the cross-case analysis. This first subsection describes prominent practices that shape the group cultures. When appropriate, I purposefully compare contrasting conditions between cases to highlight the underlying principles.

7.2.1 Pre-determining culture through staff selection

I found strong evidence for staff selection processes in all cases. Beyond requirements for the job such as accuracy in picking merchandise, personal characteristics such as attitude plays a significant role in the staff selection at all Toyota cases. For instance, after the discharge of a temporary worker I had interviewed the week before (during which she explained that this was “just a job” for her), a team leader at TPN explained to me: “We eventually agreed that this job is not for her. If you gonna work you gotta be keen to work here, to get into it. Not just to turn up, looking for money. No interest in the job.”

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A manager at TMD explained their selection process:

What I always ... give utmost importance to is for people to be very respectful with... the rest of the people ... because I think it all starts with Respect ... If you do not respect your teammates, nothing else is going to work... It is very difficult because you cannot see in an interview whether a person is very respectful or not ... but then there is a period in which you... test For example, we interview 10 people and select 2, then those 2 people have a period of 6 months in the warehouse ... to work and to see how she works Then you see there if the person is who you think she is. If it doesn't work out then you say it, that she is not the person you were looking for and continue looking for someone else.

Table 23 compares the different staff selection processes observed in the work groups. Particularly the Toyota work groups conduct rigorous selection processes and use selection criteria that go beyond strictly job-related features.

Table 23: Staff selection practices across cases

| | TPN | TTH | TMD | MPB |
|---------------------------|--|---|---|---|
| Hiring practice | Pre-selection through employment agency, extended probation time | Employment often upon recommendation of staff, probation time | Employment agency, Pre-selection through job interviews, probation time | Employment often upon recommendation of staff, probation time |
| Selection criteria | "Fit" with the work group, standardised "code matching test" | "Fit" with the work group | Emphasis on respect | Only job-related |

Another example illustrates staff *self*-selection: As part of the interviews I talked to a temporary worker at TPN. During this interview she made it clear that she did not experience working at Toyota or engaging in CI as meaningful. Although she had a good relation with her colleagues and her team leader talked highly about her work, she was clearly not happy working there. Shortly after the interview she left Toyota for a new job on her own accord.

7.2.2 Shaping culture through job rotation

Whereas at TPN and TTH group members do not change tasks or functions in the group on a regular basis⁷, both TMD and MPB make use of job rotation practices. However, they do so for very different purposes.

Management at TMD conducts a continual rotation of jobs, which involves the monthly re-assignment of positions within the process chain for the work group members (see Figure 34) in order to prevent clustering into subgroups (see also Appendix F, Section 3.1.1 for a more detailed analysis). In Figure 34, note how with every rotation, upstream and downstream neighbouring positions are exchanged.

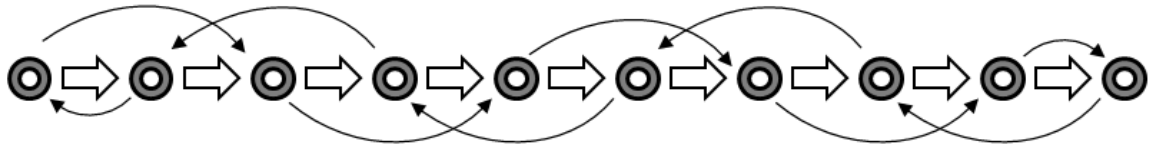


Figure 34: Schematic description of job rotation (without consideration of qualificational constraints such as forklift driving licenses; round arrows represent sequence of job rotations.

Positions in the process chain are periodically re-assigned as a means to “break down ingroup-outgroup categorizations” (van Knippenberg, 2003, p. 391) at the workplace. This serves to counter ingroup favouritism effects and increase the awareness for people to which there are no personal bonds.

This is at least partially effective, as the following excerpt with a TMD worker illustrates:

We hardly ever think about the neighbour.... Not only here [but] in general, in the world we come across many people who frequently we do not even know For example, in Toyota, and taking it as Toyota we should become more aware of our co-worker.... Sometimes I read that one should even treat others with more affection and must treat others with more, if I may say with more, not responsibility, but with more affection and affection more often toward people one does not know ... than to those who are, because we are always uh, put into a group, our family, our

⁷ Exceptions include the need for cross-training and manpower capacity bottlenecks.

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children ... or our partner, our friends, but there are also other people who are also around us then, we don't often think of them.... We have to think a bit more about other people... also in order to achieve better things.

At MPB, in contrast, strong personal bonds between peers and superiors are an essential part of how the work group functions. Cooperation is primarily motivated through strong interpersonal relationships rather than abstract rules or principles. As a consequence, no attempt is made to purposefully de-personalise work relationships through job rotation.

Job rotation at MPB involves temporary assigning production personnel to quality control tasks with the aim of breaking down mental barriers between the Quality and Production departments and raising awareness for quality aspects in the Production department. If anything, job rotation at MPB *facilitates* personal bonds within the work group.

In conclusion, although labelled “job rotation” in both case studies, the effects on the groups’ cultures are very different: While job rotation at TMD “formalises” work relationships and purposefully reduces (selective) personal bonds, no such effect was observed at MPB.

7.2.3 Providing opportunities for self-actualisation

Based on the organisational observations, Table 24 compares the opportunities for self-actualisation in the different work groups.

Table 24: Opportunities for self-actualisation in the different work groups

| | TPN | TTH | TMD | MPB |
|---|------------|------------|---------------------|------------|
| Opportunities for skill (further-) development, training | high | high | medium | low |
| Career development opportunities | high | medium | low | low |
| Variety of tasks | low | medium | medium ⁸ | medium |
| Content of work, interest of tasks | low | medium | low | medium |
| Degree of creativity required⁹ | low | low | low | low |
| Opportunities for exercising responsibilities | medium | low | low | low |

In summary, TPN provides the widest range of opportunities for self-actualisation, and TMD and MPB the smallest.

7.2.4 A corporate philosophy to induce meanings

In all Toyota cases, organisational leaders made frequent reference to the TW and the values of the TW are publicly displayed. However, the TMD case is a particular example of how leaders shape culture by “constructing meaning” for group members – often with the help of the values underling the TW. Indeed, in all Toyota work groups I found evidence that these “prescribed” meanings were “mirrored” or reproduced in a similar way by at least some work group members.

Other symbols or artefacts emerged in the interviews that shape shared meanings include the cleanliness of premises and machinery (or the lack thereof), as emerged repeatedly in the interviews across the cases.

⁸ Through job rotation

⁹ Not counting improvements

7.2.5 Giving feedback about one's performance

All Toyota work groups have effective mechanisms in place to provide direct feedback about performance and quality; be it in the form of a dealer feedback form (TTH) or oral feedback about misspicks (TPN and TMD). It is important that this feedback loop reaches all the way from the discovery of the potential problem to the people actually doing the job in a concise and timely manner. It can be attributed to this direct feedback that the workforce mostly did not perceive their job as an anonymous operation, but an important activity from which other *persons* actually benefit.

At TMD a supervisor explained the effect of job rotation as a feedback mechanism:

Almost the entire personnel pass through the majority of different work posts - this is a fundamental aspect of the monthly job rotation we conduct. It is to make them think "If you leave that [the part/container] like this, maybe in this moment for you it has been faster, but only for yourself ..., the benefit ends with you" Therefore putting yourself into the place of the person who will receive it like this, perhaps it makes her¹⁰ job more difficult. In the following month it could be you who receives it like that!

In other words, rotation of jobs is used as a feedback mechanism in the sense that it shows organisational members the results of "their own" actions once they have assumed a position down-stream in the process chain. It increases awareness of mutual dependence in the group and provides group members with integrative views of the process chain. Notably, consideration for fellow team members was a theme that emerged consistently in the interviews with the workforce so that job rotation for the sake of mutual awareness can be deemed effective. Similarly, regular meetings in all cases are not only important for communication and group cohesiveness, but also serve to identify problems and share knowledge within group and across departmental boundaries.

¹⁰ As noted at the outset of this thesis, all personal pronouns that refer to participants are used in the *female* form.

Furthermore, the suggestion systems at TMD and TPN do not only serve as an important vehicles through which employees can cognitively engage in the organisation, but also constitutes a clearly recognizable communication channel through which organisational members receive feedback and public recognition for their contributions to the group: The suggestions and their current status are publicly displayed and mentioned by name in the team briefing area on a suggestion display. Let us move on now to a more in-depth evaluation of the suggestion systems.

7.2.6 Suggestion systems with dissimilar impact a group cultures

Like with job rotation, the label “suggestion system” covers a wide range of different approaches that can each have a very different effect on a group’s culture. This section serves to illustrate these potential differences by contrasting suggestion systems in the two case studies located in the Spanish societal context. Although they may both formally be called suggestion systems, their function and integration in the organisation are very distinct.

The suggestion system at TMD should be viewed as intimately linked to job rotation as discussed previously. Continual rotation of jobs surfaces task-related ambiguities and hidden conflicts between interrelated tasks. Also, everybody in the process chain is equally affected by these deficiencies.

An executive at TMD explained:

“If [someone] proposes an idea, in the end the benefit will be for everyone because we rotate jobs. So you are here working today and tomorrow you're going to end up where her idea was proposed. Because you are correcting an error that in the end you are going to work there [sic]”

In other words, not only the person that brings forward a suggestion benefits from the improvement, but eventually everybody will have an advantage due to job rotation.

Moreover, the possibility of contributing to the development of the system withdraws – to a large extend – the basis for passive critique at the work system. In this logic the

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expected economic benefit is secondary when it comes to the decision whether or not to implement a suggestion. Consequently, the same executive explained:

It can be minor things. A kaizen idea doesn't have to be a big thing. It can be... that I'm sitting here and I put my hand... this is uncomfortable... [places hand onto the edge of the metal bench near which we are standing] It might be just to round it out. That's a kaizen idea.

In line with the above explanation, a supervisor at TMD explained that the main function of the suggestion system was to encourage cognitive engagement of the workforce with the organisation, and more specifically, how their own job affects the overall functioning of the warehouse. Therefore the worker who makes a suggestion also presents and explains it during a team briefing to the rest of the team, a manager: “The common practice is that the one who promotes the idea also participates in the implementation phase. She needs to become part of the implementation as well.”

In contrast, in the setup of the suggestion system at MPB, literally more thought was put into the design of its logo than the integration into the overall business strategy and its development as a lasting and effective motivational mechanism. The original purpose of its implementation was to improve motivation of the workforce after considerable lay-offs.

Although the MPB suggestion system is part of the ISO9001 certification, its responsibility lies with the HR department and was initially equipped with an annual budget of € 1,200 which would allow a monthly cash prize for the best suggestion of €100. All other suggestions receive no reward. The prize is awarded by a cross-departmental committee. It is debatable whether material rewards for suggestions are beneficial, but it is clear that – despite the rhetoric that “the message was ... that everyone counts” – the message of rewarding one cash prize to only one of many suggestions per month is of course a very different one.

Table 25 compares the characteristics of the suggestion system in more detail.

Table 25: Characterisation of suggestion systems (Part A)

| Feature | TMD | MPB |
|--|---|--|
| Motivation for implementation | CI is integral part corporate philosophy and business strategy* | Instrument to improve motivation of workforce after considerable lay-offs in 2008 |
| Responsibility | 1 highly skilled person dedicated to CI alone (also does data mining activities related to CI to support the rest of the team) | HR department who also does all administrative task as well as work-related risk management but without any technical or operational knowledge |
| Resources permanently available | 1 full-time, several part-time | “Side-project” of human resource manager |
| Integration into strategy | Number of suggestions is one of several KPI* | None |
| Continuity | Continuous even in times of crisis* | Discontinued after several month as a result of budget cuts |
| Type of suggestions sought | All types: quality, productivity, motivation, safety, ergonomics* | |
| Nature of rewards | Mostly intrinsic: No direct cash prize but suggestions submitted form an important part of the employee 4-monthly performance evaluation* | Mostly extrinsic: €100 monthly prize for the best suggestion, formal letter of for all valid suggestions |
| Differentiation between different suggestions | No, even small improvements are fully acknowledge as viable suggestions* | Yes, only one monthly prize is awarded for the best suggestion |

(Characteristics of TMD that are marked with an asterisk () are present in an identical or similar way in TPN and TTH.)*

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Table 26: Characterisation of suggestion systems (Part B)

| Feature | TMD | MPB |
|--|---|---|
| Committee composition and meeting cycle of the evaluation committee | N/A* | Cross functional and several hierarchical levels, monthly meetings |
| Follow-up on implementation | Highly systematic* | Sporadic or none |
| Acknowledgement | Through publicly displayed list in employee break room, includes a description of the suggestion and a picture of the employee* | Formal letter sent home to person (a public display was planned but never implemented) |
| Update on state of implementation | Publicly displayed list is continuously updated* | No follow-up or update |
| Suggestions system linked to the personnel evaluation system | Yes, clear integration. Suggestions are directly linked to evaluation criteria and bonuses* | No integration |
| Concluding remarks | Highly integrated and systematic approach to incentivise desired behaviours. | In reality, independently from the official system, employees make suggestions informally and directly to their superiors, which provides the majority of suggestions. These suggestions may or may not be considered. This practice does not involve a systematic collection, follow-up or public display of suggestions |
| Ultimate purpose | Promote cognitive engagement and initiative* | Psychological palliative |
| Effectiveness | Within Toyota Europe, TMD is one of logistic centres with the highest number of suggestions put forward per individual. | At best sporadic suggestions |

(Characteristics of TMD that are marked with an asterisk () are present in an identical or similar way in TPN and TTH.)*

The most striking shortcomings of the suggestion system at MPB are clearly in the lack of integration with other CI tools, lack of personal responsibility, the lack of continuity in its implementation and lack resources for its ongoing operation. While at TMD the employee suggestion system is integrated into the operational functioning

and aligned to the objectives of the organisation, at MPB it is not even run by the departments that are most concerned (Production and Quality).

Interestingly, when asked why the public display of suggestions was never realised, the manager at MPB answered that this was due to the lack of interest shown by abating number of suggestions after 2-3 month following its implementation – it is questionable whether this statement does not confuse cause and effect.

In contrast, there is a notable pattern across all Toyota cases: CI suggestions are dealt with in a straightforward way and priority is clearly given to an immediate implementation. All work groups have facilities on-site to realise small changes to equipment fast.

The slogan of “no cost or low cost” as a qualifying principle for CI suggestions is ever-present. However, although many of the changes to machinery that were performed by own staff must have occasioned considerable (internal) cost in terms of man-hours, these internal costs seemed to play only a minor role in the decision whether or not to implement suggestions. This is clearly at odds with a purely economical or cost-saving-oriented perspective on employee suggestions. In this logic, the slogan “no cost or low cost” serves more the purpose to guide meaning-making within the group rather than being a hard-and-fast decision rule.

At TMD the number of suggestions submitted plays also a role in the regular employee evaluation which will be discussed next.

7.2.7 Performance evaluation to encourage group involvement

Another striking difference between MPB and all Toyota cases refers to the use of incentives: While procedures at Multipueblo tie (extrinsic) rewards directly to performance outcomes in terms of output and scrap rate, Toyota relies much more on intrinsic motivation through work itself and rewards behaviours rather than outcomes only. Even the number of suggestions submitted has only an indirect impact on pay – either through a bonus (TMD) or remuneration (TPN) plus bonus.

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At TPN, a group member stated:

They encourage you to do it [submit suggestions] because, the more improvement ideas that go in, that goes toward your self-appraisal at the end of the year... your individual performance appraisals, we're also schooled on how many improvement ideas we've come up with.... which goes toward a pay rise or whatever, so that encourages you to put in ideas. That's whether the ideas are implemented or not.

On the other hand a manager at TMD explained:

We do an assessment every 4 months.... Then on that assessment, we value a lot, a lot, the Toyota Way.... Then what do we do in it ... we ask them to explain in the assessment, each value of the Toyota Way and give us an example ... or what they consider to be a particular value of the Toyota Way and to give us an example, so that really, everyone knows perfectly the values of the Toyota Way.

The priority given to criteria for the allocation of rewards differed across the cases, as shown in Table 27. Equality refers to an equal distribution of rewards irrespective of performance and equity to an allocation of rewards dependent on individual performance. Lastly, needs-oriented allocation of rewards bases the allocation of rewards on the individual's situation and is in line with humane values.

Across all cases, monetary rewards as motivators for CI emerged only sporadically. On the other hand, symbolic-emotional rewards such as recognition of one's ideas/contributions through leaders through public displays or in meetings and the follow-up of these suggestions played a more substantial role. Formal sanction mechanism such as penalties etc. (not counting lost opportunities for remuneration or bonuses) existed in none of the cases.

Table 27: Elements of the Performance-feedback-reward loop and rewards allocation criteria

| Feature | TPN | TTH | TMD | MPB |
|--|---|--------------------------------------|---|---|
| Reward for outcomes | Indirectly – remuneration and company bonus | Indirectly – company bonus | Indirectly – bonus | Directly – incentive wage for shop floor employees. |
| Responsibility for individual errors | Directly for picking errors, no direct penalisation | Indirectly through team captains | Directly for picking errors, no direct penalisation | Not standardised |
| Feedback about group performance | Routine weekly meeting (regular times) | Daily meetings | Daily meetings | Weekly meeting (irregular times) |
| Rewards/recognitions for CI behaviour | Indirectly – remuneration | Indirectly – company bonus | Indirectly – remuneration and bonus | None |
| CI linked to the strategic goal of the group | Clearly and effectively | Partly | Clearly and effectively | No |
| Individuals aware of CI objectives | Fully | To a limited degree | Fully | Partly |
| Regular training activities in CI | Initiation and ongoing | Limited, new employees lack training | Ongoing | Sporadically, not systematised |
| Criteria for allocation of rewards in order of importance | Equality, needs, equity | Equality, equity, needs | Equity, equality | Equity, equality |

7.3 The Group Cultures in Comparison

Having examined the differences in organisational practices between the work groups, the analysis now moves on to characterise the group cultures. The structure of this section reflects the multi-layered character of culture (compare Figure 3): The section starts with comparative description of the groups' espoused values and continues with a discussion of the shared meanings that were examined in the group workshops. It concludes with a final characterisation of the cultural paradigms of each group.

7.3.1 Espoused values

Both Figure 35 and Figure 36 display the espoused values of the different work groups; while Figure 35 juxtaposes organisational and societal scores, Figure 36 is designed for cross-case comparison. The cultural dimensions cultural dimensions are explained in Appendix B. In most dimensions (namely Assertiveness, Performance Orientation, and Uncertainty Avoidance¹¹) there is a remarkable degree of correspondence between the organisational scores and the societal level scores (see Figure 35). However, some noteworthy points were found and will be discussed next.

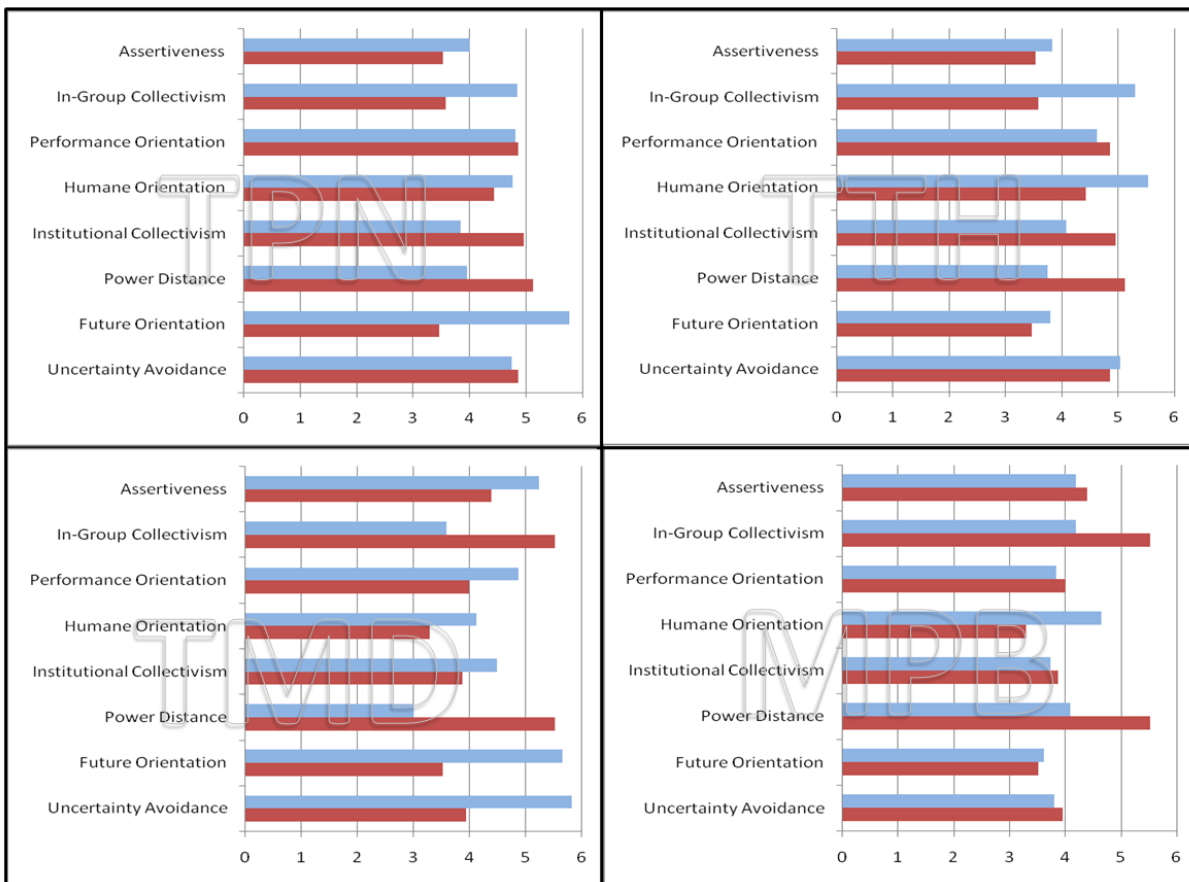


Figure 35: Espoused values across organisations (blue, top bars) and societal (red, bottom bars) cultures in comparison. Upper half = New Zealand, lower half = Spain.

¹¹ With the possible exception of TMD; however the small number of respondents limits the validity.

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- The logistics centres TPN and TMD both show a high degree of Future orientation, both in absolute and relative terms compared to the societal level, whereas the manufacturing groups TTH and MPB again result in a similar yet much lower score. The scores might reflect characteristics specific to the different operation types.
- Power Distance is smaller on the organisational than the societal level in all work groups.
- In-Group Collectivism is consistently lower in the Spanish cases (lower half) than the NZ work groups (upper half), both in absolute terms and more markedly still relative to the surrounding societal culture. Put another way, pride in and identification with the work group can be found more in the NZ than the Spanish work groups. This can be explained by the fact that in Spain the collectivistic orientation generally does not extend to the workplace, as explained in Section 6.2.2.2.
- With the exception of Future Orientation, there is a notable match in profile of the espoused values between TPN and TTH (see also Figure 36).
- The values of Institutional Collectivism and Power Distance are virtually identical in all work groups (Figure 36); the most telling differences between the cases can be found on the dimensions of In-Group Collectivism, Humane Orientation and Uncertainty Avoidance. They provided essential clues with regard to the nature and strength of social relationships as well as the extent to which a group relies on rules or norms to prevent unexpected outcomes.

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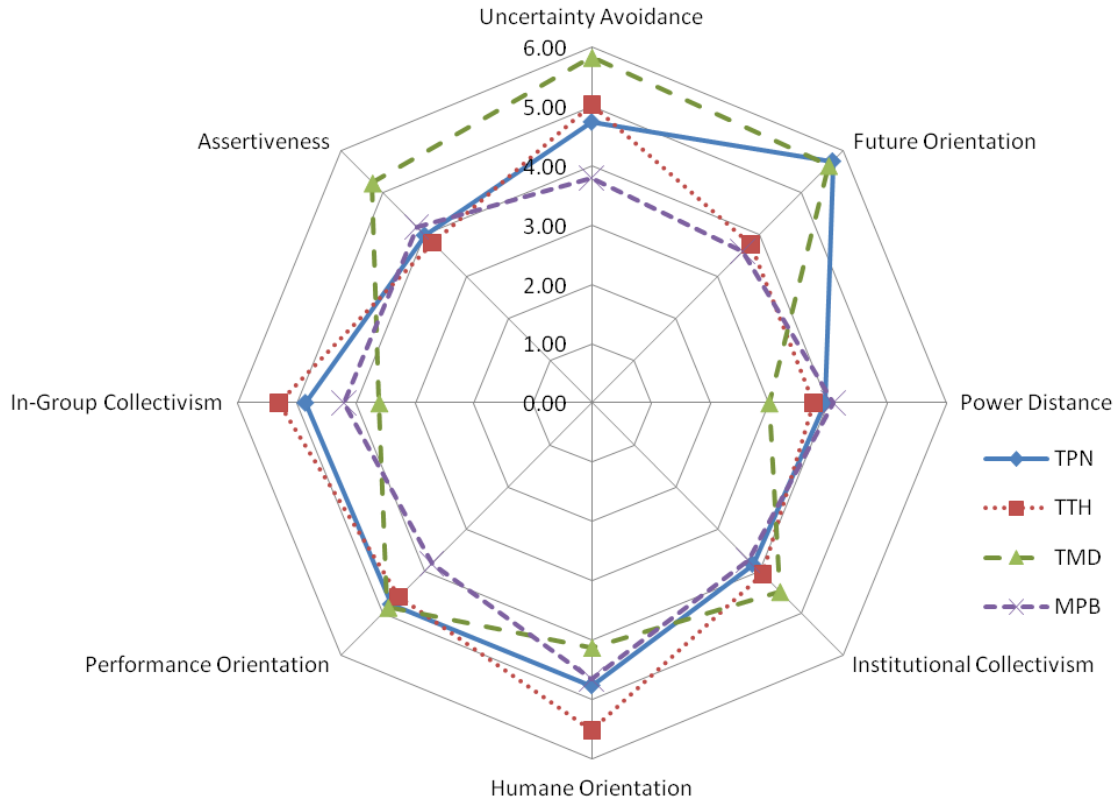


Figure 36: Profiles of espoused cultural values of all case studies in comparison

7.3.2 Cultural profiles obtained through group workshop

All work groups follow their own cultural logic, but there are themes that run through two or more case studies. While the previous section dealt with espoused values held in the group, this section compares the groups in terms of the cultural themes that were discussed and rated during the group workshops.

Figure 37 shows the cultural themes that were used identically in at least two workshops in comparison in terms of their *typicalness*. Please note that no group workshop was conducted at TMD (see Section 6.4.2.3).

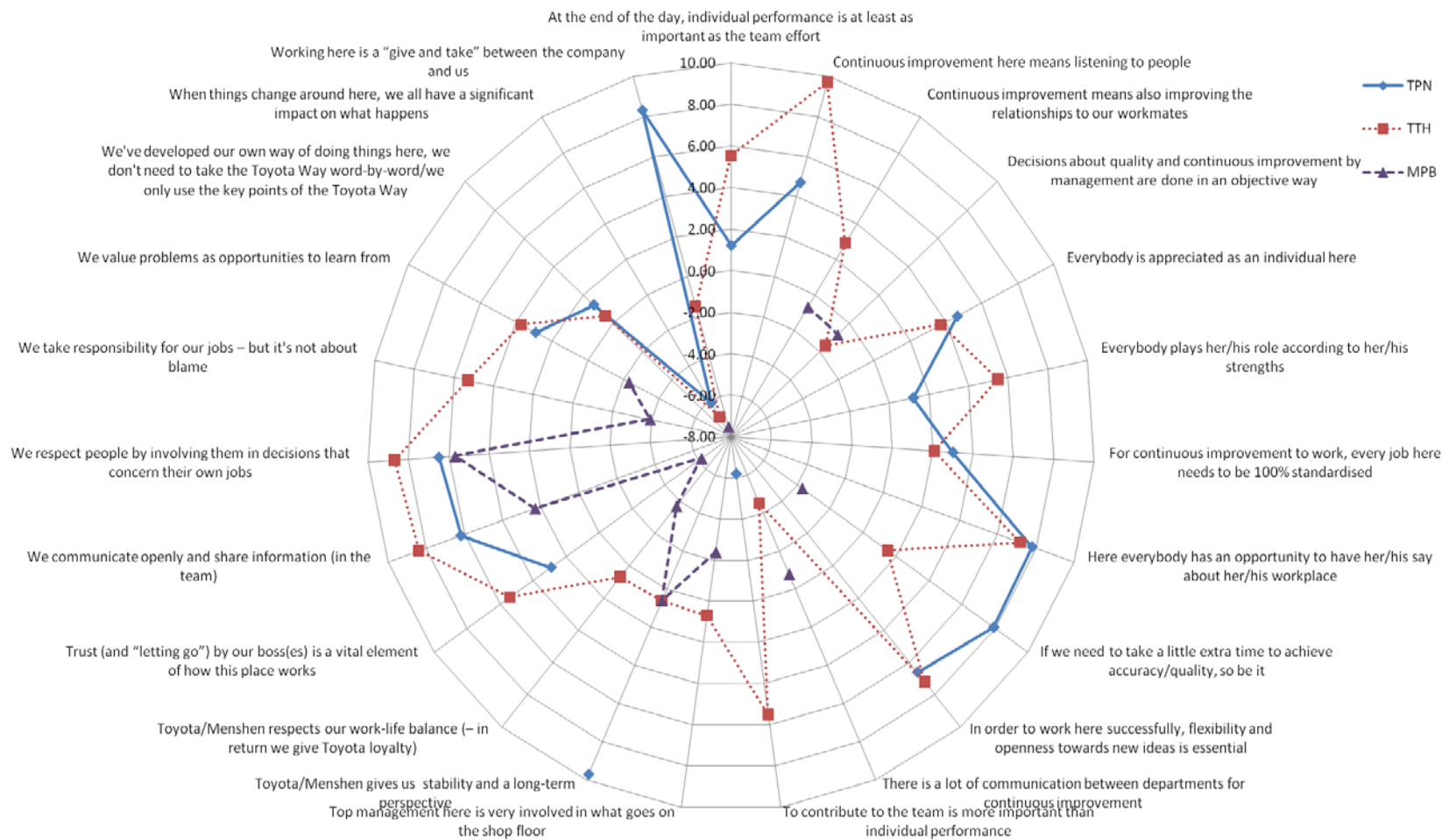


Figure 37: Cross-case results in terms of how *typical* cultural themes were deemed by workshop participants in the respective work group (Note that no workshop was conducted at TMD)

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While there are notable parallels between the TPN and TTH profiles of common themes (with the exception of the relationship between individual performance and group effort), the MPB profile is markedly different; most themes are deemed less typical than at TPN or TTH. The conclusions from Figure 37 are similar to the results displayed in Table 35.

7.3.3 Cultural Paradigms

Please note that Appendix F develops a chain of evidence to explain the internal logic of each group's culture in much more detail; this section only presents the insights in a highly condensed way. Table 28 summarises the cultural paradigms of the work groups and Figure 38 characterises them in terms of managerial control and the degree to which the group is considered a "personal place", i.e. with strong personal relations between group members.

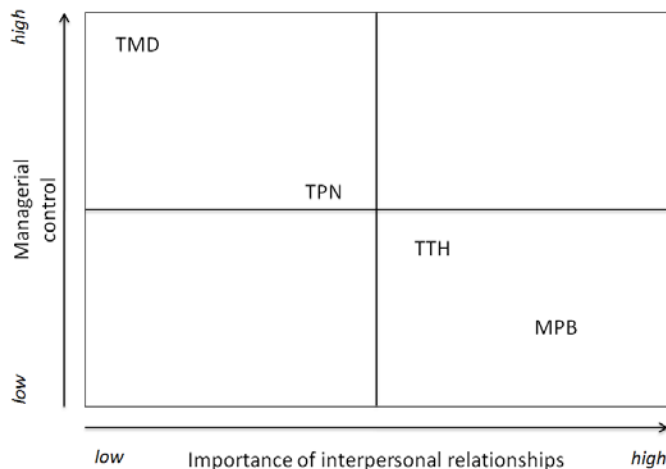


Figure 38: Concluding characterisation of work groups in terms of managerial control and the importance of interpersonal relationships

In summary, while TPN and TTH have rather similar group cultures, the difference between TMD and MPB is striking.

Table 28: Summary of cultural paradigms TPN (upper left), TMD (lower left), TTH (upper right), MPB (lower right).

| | |
|---|--|
| <ul style="list-style-type: none"> ▪ Core values: Equality and reciprocal commitment between the company and employees. ▪ Strong concern with fairness in distributions of rewards and the reciprocity in social behaviour between group members. ▪ Broad consensus around the importance of stability and long-term orientation. ▪ Strong corporate bonds, perceived as a “give and take” between the organisation and employees. ▪ Toyota provides stability, trust, relative autonomy and a respectful treatment to its employees, and in return they make their best effort to contribute to the aims of the organisation, for which CI is an effective means. | <ul style="list-style-type: none"> ▪ Group culture built around humane values. ▪ Strong cohesiveness and belief in own abilities. ▪ Group’s self-image is based partly on the demarcation from other departments and management. ▪ Changeover from manufacturing to refurbishment operation was perceived as a caesura and left a mark on the TTH culture. ▪ As a consequence, corporate bonds and the long-term orientation are not as strong as at TPN. ▪ CI is institutionalised in the form of a Staff Improvement System, which serves also as a means of integration within the organisation. |
| <ul style="list-style-type: none"> ▪ Frequent changes of immediate co-workers through job rotation shifts the nature of relationships within the group from close, friendship-based relationships, towards less close, formalised relations between colleagues. ▪ Vigorously implemented corporate philosophy becomes a normative institution that is purposefully used by leaders to reframe work relationships. ▪ leaders <i>purposefully construct meanings</i> and normative obligations and thus define acceptable behaviours in the group. ▪ Result is a highly formalised work system with purposefully depersonalised work relationships and strong managerial control; CI is a duty. | <ul style="list-style-type: none"> ▪ Culture revolves around a group of factory veterans bonded together by past success. ▪ Rather than a homogeneous group, the relationships are best thought of as a relational network. ▪ Lateral negotiation and team camaraderie are essential integration mechanisms. ▪ But relationships are often full of tensions. ▪ Camaraderie within the group is on the one hand essential for group functioning, but it is also way to bypass systematic procedures. ▪ Engaging in CI is often best understood as a ‘favour’ to teammates to whom one has a strong personal relationship. |

7.4 Key Meanings and their Significance for the Group Cultures

The characterisation of the group cultures sets the stage for a closer examination of the underlying meanings. The purpose of this last section of the chapter is to identify the key meanings that constitute the cultures of CI studied in this project. To achieve this aim, this section begins with an evaluation of performance, employee wellbeing and CI maturity of all work groups. This enables the analysis to proceed to identify the key meanings and their significance for the group cultures.

7.4.1 Performance, employee wellbeing and CI maturity

7.4.1.1 Performance indicators

As Table 29 shows, TPN and TMD exhibit very similar levels of process effectiveness and quality. It should be noted that this study is not designed to investigate the culture-performance link. The average number of suggestions submitted by TPN staff is lower than at TMD; nonetheless, this may be due to the fact that at TPN many suggestions are implemented informally without going through the suggestion system.

A comparison between the two manufacturing work groups, however, is much more restrained not least due to the fact that the Toyota Thames refurbishment plant is the only one of its kind so far and that there are no same-level performance measures available.

Table 29: Available performance indicators across cases

| Feature | TPN | TTH | TMD | MPB |
|--|---|--|--|---------------------------------|
| Number of staff improvement suggestions in 2009 | 63 amongst 18 staff = average of 3.5 per person | 300 amongst 55 staff = average of approx. 5.5 per person | 117 (fiscal year) amongst 18 staff = average of 6.4 per person | < 1 per person (average) |
| Employee turnover 2009 | Full-time: 2, Temporary workers: 4 | 2 amongst 55 staff | Full-time: 1, Temporary workers: 4 | < 10 (lay-offs) |
| Measurement of output quality | Picking accuracy: 99.94% | 0.47 defects per unit delivered | Picking accuracy: 99.95% | No comparable measure available |
| Performance measure 2009 | Average number of lines picked per hour of picking: 77.73 | No comparable measure available | Average number of lines picked per hour of picking: 77.42 | No comparable measure available |

7.4.1.2 Employee well-being

Overall, employee-wellbeing can be rated high in both TPN and TTH and considerably lower in TMD and MPB, although TMD and MPB differ in the reasons for the lack of wellbeing (see Table 30).

Table 30: Salience of themes related to employee well-being across case studies.

| | TPN | TTH | TMD | MPB |
|--|------------|------------|------------|------------|
| Concern about possibility of job loss | Low | Medium | Medium | Medium |
| Work load and stress levels expressed in the interviews | Low | Low | Medium | High |
| Lack of work-life balance as expressed in interviews | None | None | Low | High |
| Withdrawal behaviours (absenteeism and turnover) | Low | Medium-low | Very High | Medium |

An additional indication for employee well-being at TPN and TTH is that Toyota New Zealand has been a finalist in the established “Best Places to Work in New Zealand” survey seven times (Toyota New Zealand, 2010b)¹².

7.4.1.3 CI maturity

This section classifies each work group in terms of the level of CI maturity. All work groups had in common that they had – to a varying degree – made CI an operating principle of the organisation. Differences in maturity level, however, became apparent only *after* the conduct of the in-depth case study.

Using Yokozawa, Steenhuis, and de Bruijn’s (2010) framework, all Toyota case work groups can be described as being well inside the last of the 3 stages, the integration

¹² The “Best Places to Work in New Zealand” is an employee survey conducted by JRA-Unlimited which probes and compares workplace climate and employee engagement in NZ organisations.

stage. The MPB case has passed the second stage of implementation, however, it is failed to reach the integration phase (see Table 31).

In terms of tools and techniques employed one would attest MPB a high level of CI maturity. The site has been certified to ISO 9001 for many years, conducts regular internal and external audits and uses sophisticated planning tools. In this sense, I argue, MPB is relatively representative for a medium-sized company in Western Europe. In this context it is important to note that some authors use ISO 9000 series certification as evidence for CI maturity, e.g. Noronha (2002b). However, beneath the surface of tools and techniques, CI has only been internalised to a very limited degree, as the previous sections and Appendix F (Section 4) show.

Table 31: Classification of cases in terms of CI maturity (Yokozawa, et al.'s (2010) model)

| Maturity level | TPN | TTH | TMD | MPB |
|--|---|--|---|--|
| Institutionalisation and CI | CI is an important part of everyday operations. | CI is institutionalised in the organisation in the form of the staff improvement system, but amongst the older staff there is a feeling that the CI orientation is slipping. | CI is an important part of everyday operations. | CI is part of the of the management system, but its implementation is stagnant and disrupted |
| CI maturity (in terms of Yokozawa et al.' (2010) model) | Integration (maturity) | Integration (continuous striving) | Integration (striving) | Late implementation/ failed integration stage |

7.4.2 Patterns in meanings across the cases

This section proceeds to identify the most salient meanings of the group cultures.

7.4.2.1 Enabling and inhibiting meanings

A tentative approach to characterise the meanings underlying the different group cultures is through a classification into “positive” and “negative”. Positive meanings in, which I labelled *enabling meanings*, were revealed when interviewees reported enthusiasm relation to CI. They are associated with individual initiative, employee-

wellbeing and action, while “negative” meanings, labelled *inhibiting meanings*, refer to frustrations, resentments and stagnation. The ratio between enabling meaning and inhibiting meanings can be viewed as a tentative measure for the propensity of work group members to engage in CI.

The meanings that fall in these two categories were used to define two mutually exclusive sets in NVivo: Inhibiting and enabling meanings. The underlying coding nodes are listed in Appendix H. These sets, in turn, provided the criteria for a matrix query. To control for the different number and lengths of data sources in each case study, Figure 39 shows the ratio between enabling and inhibiting meanings per work group. It highlights the differences between the groups: The relative occurrence of enabling meanings is markedly higher in TPN and TTH than in TMD, and lowest in MPB.

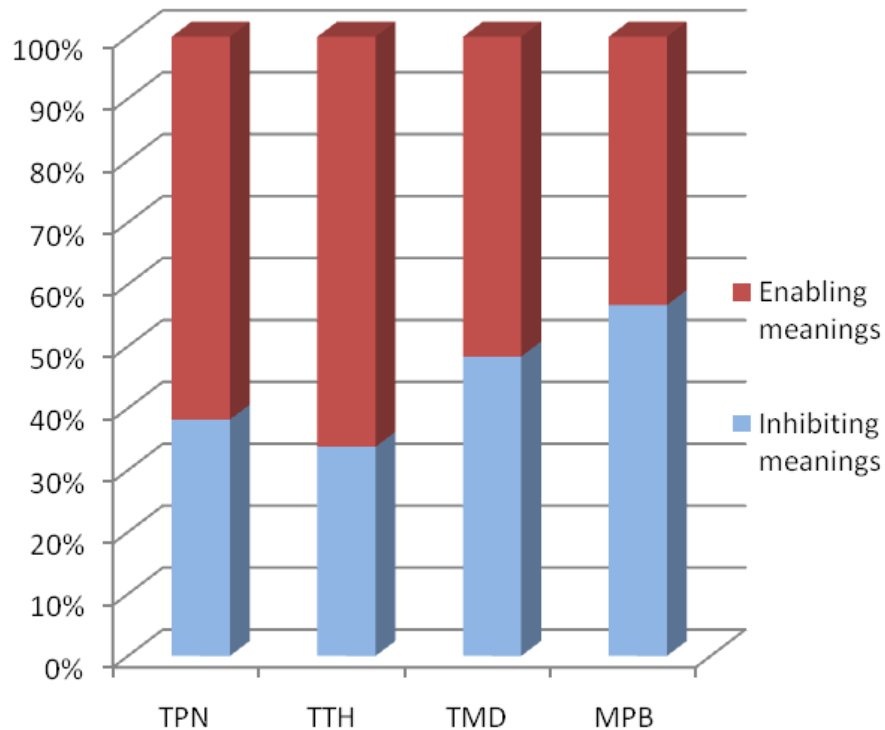


Figure 39: Ratio between of enabling and inhibiting meanings (measured in NVivo nodes coded)

7.4.2.2 Group workshop: Cultural themes that are perceived as beneficial for CI

This section investigates which aspects (themes) of a culture were perceived as important for the group members and thus help explain the differences between the cases. Figure 40 and Figure 41 show how *beneficial for CI* workshop participants in the different groups common rated the different cultural themes.

Cultural themes that were deemed most crucial for CI and around which there was the highest degree of agreement between the groups (as shown by the shortness of the bar in Figure 40 and Figure 41) centred predominantly around the importance of individual autonomy (also in the form of trust), involvement, and objective (fair) treatment in decisions around CI (Figure 40 and Figure 41). Other factors such as standardisation, conformance to the corporate philosophy, and the role/embedding of the individual within the group are deemed less important or do not result in much agreement between the different workshops.

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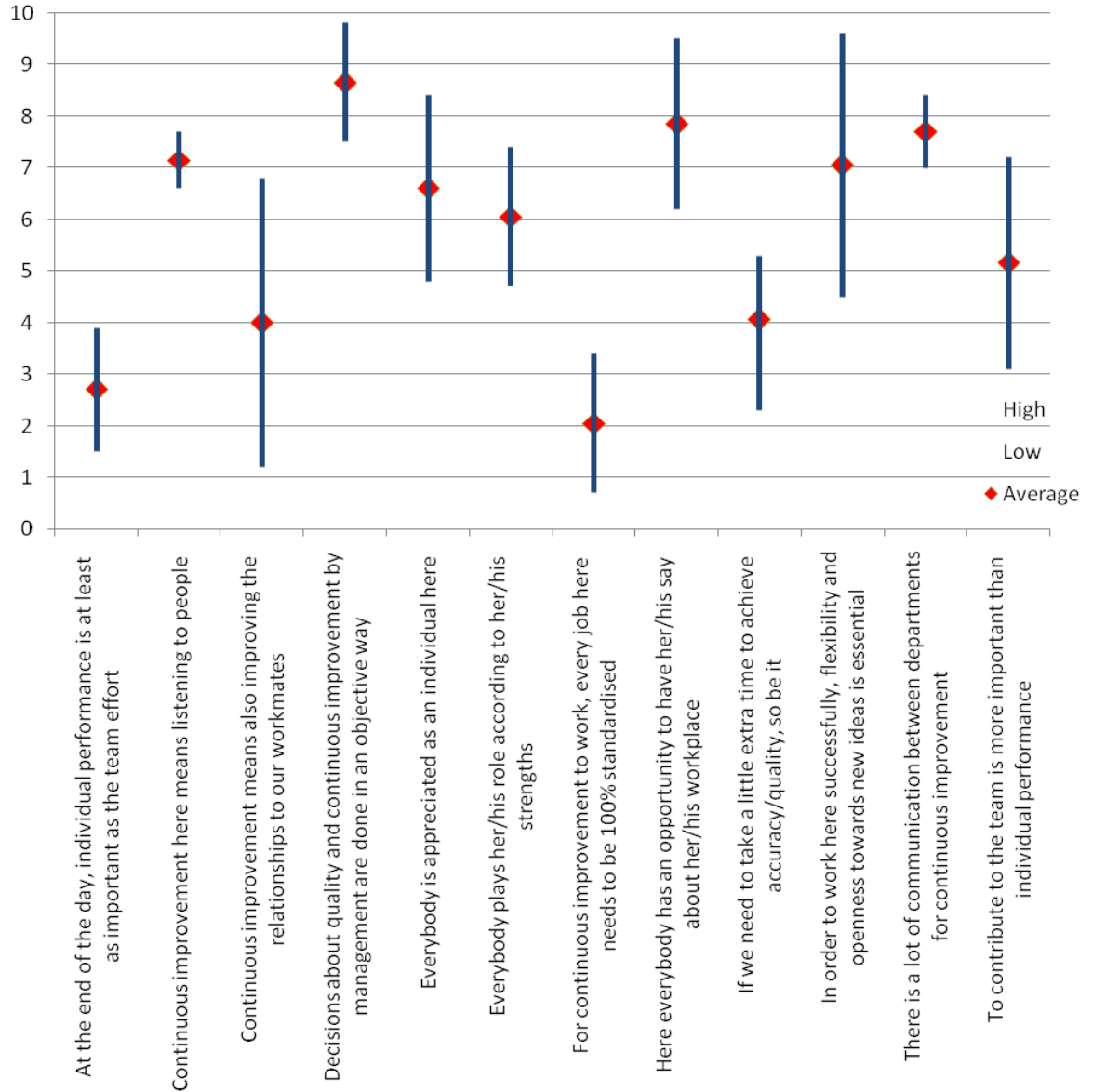


Figure 40: Degree to which common cultural themes were deemed beneficial by workshop participants across all cases (Part A)

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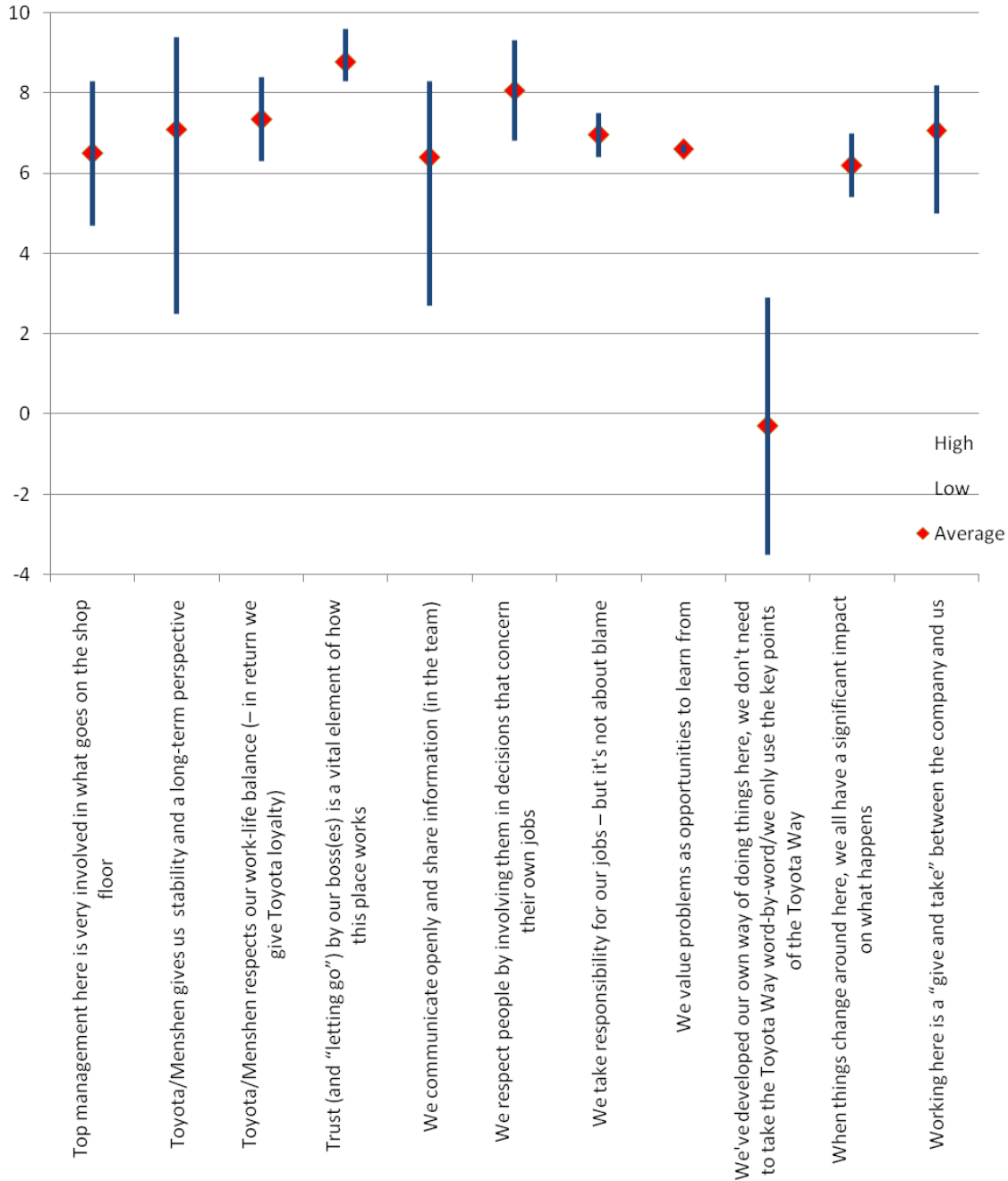


Figure 41: Degree to which common cultural themes were deemed beneficial by workshop participants across all cases (Part B)

Specifically, although TPN and TMD seem to exhibit virtually identical levels of CI performance (see Section 7.4.1), on closer inspection the group cultures differ considerably. Viewed in the light of the key findings from the workshops which highlight the importance of individual autonomy, trust and involvement in decisions,

it becomes clear that the strong managerial control at TMD is jointly responsible for a lack of employee-wellbeing and withdrawal behaviours amongst the workforce.

7.4.2.3 Themes of meanings underlying CI

This section presents a more elaborate analysis of the enabling meanings that group members attribute to CI with the aim to extract underlying themes. The interviews and workshops provided a reasonable body of evidence for this purpose. From the analysis emerged that many of the meanings are interrelated but cluster around several core themes, which are displayed in Table 32-34. The table shown below is an abbreviated version of the table in Appendix K.

Table 32: Themes of meanings ascribed in workgroups (Part A)

| Theme | Quotes from interviews and workshop to illustrate the theme |
|--|---|
| Opportunity for skill development and personal growth | [The Toyota Way] makes them [employees] feel that they are achieving what is set out for them to do. And if they have problems, then... It's not like you have a piece of paper and you've got step, step, step, step. The company here tend to work with people not directly at them, not to make them feel uncomfortable, but it's indirectly. You find that they do help you and it's not just work, it's also personalities. When I first work here, there was no way that I could sit here and do this.... It's made me a stronger person; it's made me be able to speak. |
| Meaning of CI extends beyond work into private life | If I look back now, I did use the steps [of the Toyota Way] throughout my life. What it's doing is it's making you go from your basics.... So you start off with like your problem and you shuffle through your problem. And you do it so you get to a point where you get the result that you want. So what you're virtually doing is breaking down into steps that you can handle - and I've done with problems with my life and other workplaces |
| Enhancement of personal image | I was probably a lot at the forefront of changing it from individual to team [-based evaluation], because I'm very helpful, I've helped people. I'd be helping whereas individuals would be more concerned about their own individual productivity, whereas I would be sort of more concerned about how could I help you, you know,...giving other people a hand, whereas other people weren't so much like that. Not to say that I needed help. |
| Social integration/ interaction | Yes, theses were activities that were very good ... and we formed a team, we cleaned the machines, we painted them, we left them really well we went to eat, I mean, you socialised within the company.... There was a team with those people, when you were there, well you socialised with them. |

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Table 33: Themes of meanings ascribed in workgroups (Part B)

| Theme | Quotes from interviews and workshop to illustrate the theme |
|--|--|
| Contributing to the good of the group and the company | The team system here is the bonus system, which is down to what the whole team has pulled together.... That is a team effort. And it is a team effort all-round. What I do affects someone else, and it goes on down the track. If I don't do certain things, they can't do certain things, you know? And if I make improvements..., that helps them and that helps the company. |
| Personal skill improvement | You're improving every time. Every car is different, it's like every day is different. But you're continually improving your ability to refurbish that car. |
| Contribution to team success | I've been here for many years, and, I don't know, we have achieved many things, and yes I feel good, comfortable and good... I am excited to see... the fruits. |
| Personal challenge/ drive from within | Since when we started... the management system was set up,...The new problems that you find, the new machinery, I don't know, I find it interesting, I find it exciting, I have been a part of all that. |
| Autonomy for action of the work group | If we change an aisle around the other way, we don't have to ask permission from the manager, we just go sort it out. Might have a meeting group and discuss all the points connected, make a plan, and then just go about doing it. More plan and do, PDCA [Deming/Sheward cycle: Plan, Do, Check, Act], plan, do, action. |
| Career development opportunity | If you perform and you stand out, there's a room for advancement within the company itself, fully, not just in the warehouse, where we are...And we have seen that people go out from the warehouse. Or go even on to bigger things. |
| Improve work for oneself and others | I think a lot of it is common sense. Trying to make my job easier, and make other people's job easy. |
| Work variety and social interaction | So I might be doing a small project here but something might happen so I have to go off that project. I enjoy that, I don't mind doing other things. Yeah I'm enjoying my job because I got a great variation in what I do and the people I work with. |
| Feeling of being able to make a difference as an individual | If you've got ideas that you feel you can improve something; they're always looking for improvement. They have a system down where you write it down and it goes forward to a committee. They look at it, go through it, and they decide whether... the improvement may be beneficial to the company. And then if you come up with an exceptionally good idea you get rewarded for it. The processes of its going through are always talked about at our weekly meetings like you saw, where you have the opportunity to speak up. |
| Perception of constant progress | And just the achievement that we achieve, day-by-day, week-by-week, year-by-year. Even in the time you've been coming you have seen things shift and move, it's just continuous. We probably never get the perfect set-up, but we will always be shifting, trying to improve. |

Table 34: Themes of meanings ascribed in workgroups (Part C)

| | |
|--|--|
| Personal recognition for achievements | And they actually [award] ...the best idea, they'd actually... award you with something, a petrol voucher or something for the best idea, that sort of thing. So you actually get a bit of recognition that way and, by them doing that, they actually implement it and do it. |
| Being kept informed | I quite like getting here in the morning and checking up on the board, knowing what I'm going to be doing after lunch.... Yeah, I quite like coming here in the morning and knowing exactly what I'm going to be doing. |
| Pride in the group's achievements | This one [warehouse] is a little bit unique. In Japan, most things are done by hand, and off ladders.... I know the picking rate in this country is quite high... I know they [the Japanese headquarters] do use us as a bit of a showcase. |
| Having developed one's own approach, being distinct as a work group | I think we put our Kiwi ingenuity, our way into it. You know, when there's a problem ... we use our Kiwi ingenuity. The expertise in the warehouse, to look at it, we can't go to a Japanese Toyota Way book and find the answer. That's where we developed our way. |
| Material and relational stability | Why I stay? I think I like stability and my wife likes stability and my family likes stability. |
| Achievable workload/ no overburden | I can plan my day around my work load and then...with the acquired time ... do different projects. |
| Being respected as an individual | They are just so... interested and supportive.... They are giving, they are caring, they're so everyday people. |

7.4.2.4 Patterns between cases

To investigate the cardinal differences between the work groups, I used the key themes that I extracted in Table 32-34 and used them to conduct a comparison between the work groups.

Table 35 provides further evidence for the distinctness of the group cultures. The salience of the different themes differed considerably between the work groups. These variations in cultural themes reflect the differences in CI performance and employee-wellbeing highlighted in the previous section and can be therefore understood to substantiate the importance of the cultural themes.

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Table 35: Occurrence of themes in interviews and workshops in across the case studies

| Theme | TPN | TTH | TMD | MPB |
|---|-----|-----|-----|-----|
| Opportunities for skill development and personal growth | ++ | ++ | + | - |
| Meaning of CI extends beyond work into private life | ++ | + | ++ | 0 |
| Enhancement of personal image | ++ | + | + | 0 |
| Social integration/ interaction | + | + | -- | ++ |
| Contributing to the good of the group and the company | ++ | + | 0 | - |
| Personal skill improvement | ++ | + | + | - |
| Contribution to team success | + | + | - | 0 |
| Personal challenge/ drive from within | + | + | ++ | + |
| Autonomy for action of the work group | ++ | + | + | -- |
| Career development opportunity | ++ | + | 0 | - |
| Improve work for oneself and others | ++ | ++ | ++ | + |
| Work variety and social interaction | + | + | - | 0 |
| Feeling of being able to make a difference as an individual | ++ | ++ | + | -- |
| Perception of constant progress | + | 0 | 0 | - |
| Personal recognition for achievements | ++ | + | ++ | - |
| Being kept informed | ++ | + | ++ | + |
| Pride in the group's achievements | ++ | + | - | 0 |
| Having developed one's own approach, being distinct as a work group | + | + | + | 0 |
| Material and relational stability | ++ | +- | +- | + |
| Achievable workload/ no overburden | ++ | ++ | +- | -- |
| Being respected as an individual | ++ | ++ | +- | - |

(++ = pervasive presence; + = odd occurrence; 0 = no occurrence; +- = occurrence but absence also criticised by others; - = absence criticised; -- = absence strongly criticised)

7.5 Chapter Summary

This chapter presented the empirical results from the case studies. The analysis started at the level of individual attribution of meaning of CI. The results indicated that internalised values, tapped through an evaluation of a spontaneous self-description (TST), play an important role in whether individuals included social references in the meanings they ascribe to CI practices or concepts. However, difference in the individual attribution of meanings indicated variations between the different work groups that were then investigated in the subsequent sections. They contrasted therefore the work groups in terms of practices, espoused values and shared meanings. The last section worked to identify key meanings underlying the cultures of CI and investigated their significance for the respective group cultures.

This chapter has set the stage for the Discussion in the next chapter which develops the key principles underlying the empirical data and reflects them in the context of the existing theory.

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8. Discussion and Limitations

Abstraction, when done properly, goes beyond the directly observable in understanding the meaning and dynamics of business processes in their original context.

(Lillrank, 1995, p. 975)

8.0 Introduction and Overview

This chapter discusses the findings in relation to the research questions along with some supporting evidence, and anchors the analytical claims from the data within existing theory. Accordingly, each main section of this chapter is opened by the research questions it addresses.

The first section is concerned with the individual level. It examines the features of key individual meanings underlying CI against the background of existing theory, most notably Erez and Earley's (1993) cultural self-representation framework. The second section describes how CI is organised in the case organisations to facilitate these meanings. With individual meaning-making discussed, the third section moves on to the cultural level and examines different enculturation effects that lead to the sharing of meanings within a group. The following fourth section identifies the mechanisms through which shared meanings guide action toward CI in the organisations. The fifth section deals with differences and commonalities across cultural settings. Finally the last section is concerned with the implications and limitations of this study as well as the transferability of the findings to other settings.

In contrast to the previous chapters, this chapter does not end with a conclusion section. Instead, the conclusions of the study – i.e. the answers to the research questions – are summarised in the following Conclusions Chapter.

8.1 Features of meanings underlying Continuous Improvement

Underlying research question:

How does CI become meaningful to individuals and what are the key themes of the meanings underlying CI?

This section develops the idea that the meanings individuals attribute to CI implicitly reflect self-motives, regardless of the work group. In line with cultural theory these self-motives are: enhancement, consistency and efficacy.

In order to examine this meaning-making process in relation to CI, the first part of this section discusses the link between the self-concept and individual meanings. The second part moves on to determine common characteristics amongst the meanings of CI.

8.1.1 The link between self-concept and individual meaning-making

In line with the concept of duality of culture, the first step in deciphering individual meaning-making with regard to CI is to examine the role of an individual's internalised values. Therefore this section discusses the link between the self-concept and meanings ascribed to CI.

The accounts given by the interviewees often describe how concepts, practices and interactions related to CI come to be meaningful for the individual. Attribution of meaning to concepts and practices of CI is a complex combination of many contributing factors, some of which were examined in this study. Attribution of meanings is similar to what Kostova (1999) describes as "internalisation". She explains:

Internalization is that state in which the employees ... attach symbolic meaning to the practice-they "infuse it with value" (Selznick, 1957). A practice becomes infused with value when it is accepted and approved by employees, when the employees see the value of using this practice, and when the practice becomes part of the employees' organizational identity. (p. 311)

In relation to the international dissemination of CI concepts, Aoki (2008) elucidates further:

People in overseas plants can produce their own meaning of Japanese kaizen activities by participating in these activities. Management practices are able to allow the people to create their meanings of Japanese kaizen activities by providing them with a context to learn Japanese kaizen activities. It is such management practices that lay the ground for implementing Japanese kaizen activities in overseas plants. (p. 523)

With regard to a class of meanings that I described as “reinterpretations” in Section 7.1.2, I found an interesting pattern in the data: When disregarding the interviewees’ organisational and societal affiliation, the individual-level analysis shows that individuals with a less salient personal self (as tapped in the TST) have a consistently higher propensity to make relationship-oriented reinterpretations of CI (see Figure 31). In other words, individuals whose spontaneous self-description includes social reference to groups, be it direct, personal relationships (relational self) or depersonalised categories (collective self), are likely to include social references in the meanings they attribute to CI concepts or practices, too.

This is in line with cultural theory, that argues that individuals with a stronger personal¹ self-construal are more likely to construct the meaning of a social situation using individualist elements (Erez & Earley, 1993; Triandis, 1995). However, it should be noted that not all interviewees expressed reinterpretations, regardless of the self-concept.

What is interesting is not the magnitude of the effect, but its consistency: Interviewees with a high personal self of 80% or more hardly made any relationship-oriented reinterpretations when they described their understanding of CI concepts, while the

¹ Triandis uses the terms “idiocentric” and “allocentric” for the individualism and collectivism, respectively, at the individual level.

ratio between relationship-oriented and non-relationship-oriented reinterpretations is much higher for interviewees with a less-salient personal self.

Thus the self works as a frame of reference for an individual's meaning-making in relation to CI: People aim to develop meanings that are aligned with their self-concept. In line with this argument, interviewees who used a "family" metaphor or analogy in describing the group culture were consistently those with a stronger relational self-construal, i.e. those who made many social references in their self-description. To my surprise, however, the effect is much weaker for a lower salience of the personal self-construal: Individuals with a very low personal self (around 40%) did not necessarily attribute more relationship-oriented meanings.

Notably, these individuals appeared insecure in the interviews more often than others did. In this connection it is important to note that relationship-oriented reinterpretations of CI usually concur with non-relationship-oriented reinterpretations, while the opposite is not necessarily the case (see Figure 32). Moreover, relationship-oriented-reinterpretations often include multifaceted, "rich" meanings that have implications for the role of the individual and social coordination within the group. Thus it seems a good balance between individualistic and group-centred elements in the self that allows individuals to consider others in their own "cultural map" while maintaining a positive-self image, which is in line with the proposition of Triandis (1995).

The literature provides broad support for the link between individual values on the one hand and attitudes, meanings and behaviours on the other. For instance, Hatrup and colleagues (2007) reported that an individual's "work group collectivism" is positively related to the perceived importance of work and the pride in it: "The greater one's collectivist orientation toward others at work, the more central the role of work in one's life. In contrast, those who identify less with others at work are also those less likely to see work as a central life interest" (p. 254). Wagner (1995) showed that I-C orientation on the individual level impacts the degree of cooperation in groups and Brewer and Yuki (2007) argued that the self-concept is central for the

identification with groups. Similarly, Gahan and Abeysekera (2009) found that the self-concept mediates the relationship between societal culture and work-related values that relate to “self actualisation, sense of achievement, self-determination and competence” (p. 130). Therefore it seems plausible that the self-concept is also an important determinant for the attribution of meaning in relation to CI practices and concepts.

Although the sample size of the present study is clearly insufficient to provide conclusive evidence on its own, this homogeneous pattern across the diverse case contexts is valuable to guide the further analysis in the following section.

8.1.2 Self-motives underlying CI

The above results are remarkably in line with Erez and Earley’s (1993) cultural self-representation theory which predicts that the meanings people ascribe to management practices are aligned to their deeply internalised values. According to this theory, organisational members also use “their cultural values as criteria for evaluating the potential contribution of various management practices to the fulfillment of their self-derived motives” (Erez, 2000, p. 7). More specifically, these self-motives are consistency, enhancement and efficacy. They are explained in Table 36 with reference to the group and individual level. According to Erez and Earley’s (1993) theory, individuals experience self-worth and wellbeing by fulfilling these motives.

Table 36: Description of self-motives (Modified from Erez, 2000, 2009)

| | Centred around the individual | Centred around the group |
|-------------------------|--|--|
| General criteria | Personal criteria and standards. | Criteria and standards by one’s reference group. |
| Self-enhancement | Maintaining a positive self-image by selectively sampling, interpreting and remembering events such as personal accomplishments or individual successes; personal image. | Maintaining a positive image as a group by selectively sampling, interpreting and remembering events such as group accomplishments or group successes, group image. |
| Self-efficacy | Perceiving oneself as competent and efficacious; experience of control over the environment, an individual’s sense of growth. | Perceiving one’s group as competent and efficacious; perceived exercise of control as a group. |
| Self-consistency | Experiencing a sense of continuity and consistency. | Experiencing a sense of continuity and consistency in reference to the collective history of the group to which one belongs; this includes the maintenance of stable relationships to group members. |

As shown in Table 37, all themes that were previously extracted from the interview and workshop data (see Table 32 – Table 35) can indeed be attributed to one or several self-motives. Strikingly many of the themes cluster around the motive of self-efficacy.

Put another way, when group members perceive CI as meaningful, this is because CI is perceived to fulfil these self-motives. In line with Erez and Earley’s (1993) cultural self-representation theory, practices of CI indirectly contribute to personal well-being. In negative instance where self-motives are not fulfilled (see Appendix K; *negative instances*), organisational practices are perceived as a threat for or harmful to personal well-being. The different aspects of the self relate to the ascription of social meanings (Markus & Kitayama, 1991), motivational concerns (Brewer & Gardner, 1996) and social identification with groups (Brewer & Yuki, 2007). The following subsections discuss the different self-motives in more detail.

Table 37: Self-motives in meanings underlying CI (I =individual; G =group)

| Themes | Enhancement | Efficacy | Continuity |
|---|--------------------|-----------------|-------------------|
| Opportunity for skill development and personal growth | I | I | |
| Meaning of CI extends beyond work into private life | | I | I |
| Enhancement of personal image | I | | |
| Contributing to the good of the group and the company | G | G | |
| Social integration/ interaction | | | G |
| Personal skill improvement | | I | |
| Contribution to team success | | G | |
| Personal challenge/ drive from within | | I | |
| Autonomy for action of the work group | G | G | |
| Career development opportunity | | I | |
| Improve work for oneself and others | | I/G | |
| Work variety and social interaction | | I/G | |
| Feeling of being able to make a difference as an individual | | I | |
| Perception of constant progress | | | I/G |
| Personal recognition for achievements | I | | |
| Being kept informed | | | I |
| Pride in the group's achievements | G | G | |
| Having developed one's own approach, being distinct as a work group | G | G | |
| Material and relational stability | | | I/G |
| Achievable workload/ no overburden | | I/G | I/G |
| Being respected as an individual | | | I |

8.1.2.1 Self-enhancement

The motive of self-enhancement refers to all meanings that help maintain a positive image as an individual or as a group. It can be expressed in pride in the group or by

highlighting or seeking recognition for one's own achievements, as expressed by many participants. Notably, many CI practices include acquiring new competencies, such as negotiation, group leadership or problems solving – skills that are also applicable outside the work-sphere and lead to a perception of self-enhancement.

This is similar to findings from Gómez (2004), who reported extensive training of all employees in math, statistics and even philosophy of science in addition to technical training as a critical part of a CI and continuous learning implementation in a Mexican organisation. In this sense training in non-strictly work-related skills makes CI appear meaningful to employees through the self-enhancement motive and thus fosters its acceptance amongst the workforce.

8.1.2.2 Self-efficacy

Self-efficacy is the single most important driver of CI discernable in the meanings described by the interviewees across all cases (see Table 37). It is the “conviction that one is competent and efficacious” (Erez, 2009, p. 621) and thus reflects the conviction of being capable to perform, exercise influence over events and ultimately being in control of one's life – as opposed to believing that much of what happens in the group or organisation is beyond one's control. It is closely related to work autonomy. In this sense, Erez (2010) explains that “work autonomy is congruent with individualistic values, emphasizing freedom of choice and providing the opportunity to influence and to attribute the behavioral outcomes to oneself” (Erez, 2010, p. 393).

Interestingly, the significance of “human independence” was already highlighted in one of the first descriptions of Toyota's production system and corporate philosophy: Sugirori and colleagues (1977) wrote that “it is not a conveyor that operates men, while it is men that operate a conveyor, which is the first step to respect human independence” (p. 559).

This autonomy is perceived by group members across the Toyota cases both in terms of responsibility and decisions. An example from the group workshops illustrates the importance of the *perception* of exercising control of one's workplace, even if this is

not the case by objective standards: While the cultural theme *We take important decisions together* was discussed in the group, many members were visibly reluctant to declare that the most important decisions were indeed made from outside the group. At one occasion, a member insisted: "If it's important it's being brought up in meetings!" as if convincing herself that she was exercising control of her workplace. Similarly, a great deal of consensus emerged around the importance of cultural themes that imply autonomy for action across all workshops, as shown in Figure 40 and Figure 41.

The opposite of self-efficacy is a feeling of helplessness that I encountered particularly amongst MPB participants. Statements such as "Now the company decides, I don't know who in the company.... I have no idea" express the view that the changes necessary for CI are largely beyond the control of the individual and not worth pursuing. This belief in an *external locus of control* was habitually accompanied by resignation and passivity.

As opposed to that, solving problems autonomously through the work group greatly enhances self-efficacy. The highly structured, step-by-step approaches to problem-solving taught by Toyota are particularly relevant in this connection: They enable the group members to experience progress and success throughout the whole processes and make them genuinely believe that they have the capacity to succeed. This is well encapsulated in the meaning that one participant attributed to the TW: "Breaking problems down into bits that one can handle".

Therefore it is no wonder that a number of participants across all Toyota work groups reported that they applied the principles underlying CI/TW also in their private lives, which can be understood as evidence of how powerfully CI/TW contributes to the self-motive of efficacy. This perceived efficacy of individuals and the group as a whole positively "cross-influences" the perception of other practices: For instance, the TPN work group – otherwise shaped by highly egalitarian and individualistic values – accepted the strong managerial control through the "Daily Control Board" because it is a technique that leads to coordinated action and thus contributes to the feeling of

being effective as a group. Similarly, there was clear consensus amongst the TPN workshop participants about the necessity of group coordination through leaders, although they ostensibly violate egalitarian principles.

8.1.2.3 Self-consistency

Particularly the juxtaposition of the two NZ-based work groups TPN and TTH illustrate the importance of consistency. While a stable, mutually committed relationship between the organisation and its employees is highly important for TPN's group culture, at TTH doubts in the future as a result of its interrupted past lead to a much more cautious attachment of individuals to the organisation.

According to the findings of Borooah (2009), the more importance an employee places on social interaction, responsibility and usefulness, the more likely he or she is to be satisfied in her job. Indeed, in the present study many participants who were apparently satisfied with their job and perceived CI as meaningful, also placed great emphasis on stability, safety, security and group belonging.

Through CI people are able to actively participate in and shape change of their work environment and the organisation as a whole. Although the individual contribution may be a minor one, the involvement in the process helps them experience self-consistency and ultimately identify with and embrace organisational changes. Experiencing consistency and meaningfulness through participation in CI is similar to what Mead (1985) described:

American observers have often commented that the Japanese often go on improving a process or a product long after there is any apparent justification for it or appreciable improvement to be gained. The Japanese response is that, while they may not be able to achieve absolute perfection, striving for it adds a dimension of meaning to the worklife. (1985, p. 13)

In summary, the argument presented here is that the drive and enthusiasm that many participants from the Toyota cases exhibited were due to the fact the CI meant something more to them than just enhancing organisational efficiency. This idea of CI

is supported by the ubiquitous presence of slogans which are obviously designed to assist employees in constructing meaning in relation to CI in ways that make their job motivating and satisfying for them (for examples see Appendix F, Subsections 1.1.3 and 2.1.5).

When CI is viewed as a means to allow group members experience self-worth by satisfying self-motives, other findings also fall into place: Consistently across the Toyota cases, even suggestions for minor improvements that do not give rise to considerable performance benefits are highly valued.

A valid question is whether it is really the fulfilment of self-motives which makes the CI culture at Toyota work. The cross-case comparison with MTB can provide a tentative answer: When CI does *not* fulfil individual self-motives it does *not* work.

8.1.2.4 Multiple meanings

The individual meaning-making process is highly complex and the result of many different factors, some of which have been examined here. Although the self-concept allows discerning a basic pattern in the meanings, there are still profound individual differences. Even within the same work group, a wide range of individual meanings is expressed. These tensions between individual views are probably normal when trying to grasp a group-level phenomenon; however, when recognizing that “sharedness” of meanings is central in the culture construct, some discussion is appropriate. This is the purpose of this subsection.

For instance, while for some group members innovativeness and autonomy that implies deviations from the “original” TW are central aspects of CI, others insist that the workgroup conforms exactly to the TW. While there was often no general agreement on *how* specific practices were perceived as meaningful in the individual interviews (i.e. to which cultural theme they predominantly referred, see Table 37), the majority of (Toyota) interviewees *did* perceive CI as meaningful for themselves – in one way or another. For some it might be something that encapsulates self-

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development (“it is like having our own business”), while for others, stability or the feeling of belonging to the work group is the essential aspect of their meanings.

Put another way, in the same workgroup CI can mean different things to different people; what these meanings have in common is that they are perceived as an opportunity for the fulfilment of self-motives. Thus what people share are not necessarily the exact meanings, but the fact that they perceive the situation/practice/concept as *meaningful* and can relate to it. Clearly, this has implications if one intends to locate a culture of CI using surveys and statistical techniques – variability among group members’ views is not necessarily a sign for the absence of a common culture.

Only in a group situation, such as a meeting or the group workshop, the different views are brought together. Here the individual meanings are “woven into a shared frame of reference” (Saka, 2004, p. 221). This is similar to what Schulz (1995) described in her study: “The same organisational reality provides several possible interpretations, which together create the socially defined reality” (Schulz, 1995, p. 79). Thus consensus around core meanings only emerges through social interaction. In this view, the group’s culture is in a permanent state of coming-into-being. Rather than a fixed entity, it is an emergent, dynamic and negotiated process. This is an important point, which will be elaborated in the third Section “Processes Through Which Meanings Become Shared” of this chapter.

Culture thus is probably best thought of as multi-faceted or multidimensional, rather than clear-cut and homogeneous. Nonetheless it is appropriate to talk about “shared meanings’ in the definitional sense, for the “meaningfulness” clearly constitutes a link between the group members and provides coherence to their experience. As one executive said in a metaphorical sense “We all speak the same language”.

8.2 Conditions That Facilitate Meaning-Making Towards CI

Underlying research question:

What are the conditions and organisational features that assist in or constrain the development of these meanings?

If attributing meanings to CI is the result of experiencing self-enhancement, efficacy and consistency, this section argues, then it is necessary to identify the necessary conditions and organisational features that allow people to fulfil these self-motives.

The starting point of the analysis is the insight that there are considerable differences in the meanings attributed to CI between the cases (see Table 22). More specifically, interviewees of the work group MPB showed a markedly lower propensity to attribute relationship-oriented meanings, irrespective of the individual self-concept². Thus, while a low salience of the personal self often seems to foster the attribution of relationship-oriented meanings, it does not guarantee them. Although there is a discernable pattern, it is not deterministic; the self-concept seems to be a necessary but not sufficient condition. Thus meanings seem to be also the result of local social processes or conditions - if the social context does not nurture certain meanings, they do not occur.

Hence the following sections describe and discuss the organisational practices, institutions and structures I encountered across the case organisations that were

² Irrespective, there seem to be strong between-case differences in the self-construals. The average salience of the personal self at MPB was markedly higher than in the remaining work groups, as Figure 31 shows. Although the lower age average at MPB can provide a possible explanation (cp. Appendix I for a discussion of age as a determinant of the self-concept), the fact remains that the average personal self-construal is more salient amongst the participants of MPB than at any of the Toyota workgroups. This can also be understood as an indication of staff selection processes.

geared toward fulfilment of self-motives and consequently enabled people to develop meanings in relation to CI.

8.2.1 Conditions that enable self-enhancement

One of the most important enablers of self-enhancement is the principle of *trust*. At the investigated Toyota cases it is omnipresent in structures (flat hierarchies provide autonomy for subordinates), leadership style (empowerment and the absence of “micro-management”) and procedures (the fact that employees can implement their own suggestions). Similarly, as a researcher and therefore organisational outsider I was entrusted with unobstructed access to all the facilities.

This is in accordance with the predominant views in the literature that a trust is critical factor in establishing organisational cultures that are conducive to CI (Recht & Wilderom, 1998; Yokozawa, et al., 2010). Similarly, Adler, et al., (1999) identified in the Toyota Production System trust in structures, procedures and rules.

Blame, on the other hand, would make it impossible for individuals to maintain a positive self-image and thus undermine the motive of self-enhancement. Notably, across all Toyota case studies, there is a broad consensus amongst team members and leaders that errors are opportunities to learn from but should *never give rise to blame*.

In this sense, Bendoly and colleagues (2009) noted:

Blame also leads to mistrust, non-willingness to share (information or physical resources), [and] an altered sense of accountability.... If blame is serious and endemic element of an organizational environment, its effects can be pervasive across multiple operational activities and can be informative in predicting the effectiveness of a given work-structure. (p. 11)

The motive of self-enhancement is also fulfilled through the *recognition of achievements* and contributions, which can take various forms: Group members receive recognition through suggestion systems, where suggestions are acknowledged through public displays. In contrast, the suggestion system at MPB fails to

acknowledge individual contributions and thus “illustrates a case where the complexity of a Japanese organizational innovation was not adequately captured and abstracted” (Lillrank, 1995, p. 979) (see Chapter 7.2.6). Another pattern across all (Toyota) cases is that any contributions to the group members are recognised in front of the group during team meetings.

There is a variety of other ways to entrench self-enhancement, ranging from very obvious measures (e.g. giving employees the opportunity to play a part in the “We believe” add campaign (see Appendix F, Subsection 2.1.5) to more subtle ways used to induce meanings. For instance, Toyota’s “obsession” with workplace safety and skill development can be interpreted as sign of strong appreciation for the individual – and was interpreted as such by many employees.

On the other hand, not receiving the commensurate level of recognition for one’s contribution or one’s suggestion going unheard are reasons for serious frustrations amongst the workforce, as examples at MPB show. Even at instances where individual behaviour was hidden behind group behaviour this was perceived as demoralising when identification with the group was low. This explains why at Toyota top priority is placed on ***acknowledging individual suggestions*** and tracing the status – even if they are eventually not implemented.

Interestingly, monetary and other extrinsic rewards to emphasise individual achievements and strong differentiation between individual suggestions were absent altogether in the Toyota cases. Self-enhancement as subjectively perceived social and personal significance was of only minor importance. This might be due to the importance of modesty in NZ societal culture, the egalitarian values of the work groups studied or even the modest undertones of the TW.

Self-enhancement, however, can take different shapes in different contexts. For instance, the group culture of TPN is built around the core values of ***fairness and equality***. Therefore an important aspect that contributed hugely to the positive self-image as a group is the equal treatment of temporary workers at TPN. This example also shows the fragility of self-enhancement: “‘Segregation’ in terms of privileges

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between life-time employees as opposed to temporary workers in Japanese organizations” that is describe by Frith (1992, p. 113) would be hugely conflictive with the group’s core values.

This has parallels with the importance of *good community relations* as part of Toyota’s culture, which previous authors have highlighted (Liker & Meier, 2008). While universal applicability across cultural boundaries is not claimed, it is clear that this is a measure that can contribute to identification with the organisation through collective self-enhancement.

The notion of *respect* plays an outstanding role in this connection: Across all cases, respectful behaviour was identified as the one *conditio sine qua non* for experiencing self-enhancement.

Similarly, d’Iribarne (2002) observed the following in his case-study based research of a TQM implementation in Mexico and Morocco:

To motivate people, no matter where they are or what their culture might be, one must treat them well, respect them, give them responsibility, listen to and inform them, justly compensate their efforts, promote the feeling that they belong to a remarkable team, and permit them to trust each other. (p. 254)

Even at MPB, where the notion of respect is not anchored in the corporate philosophy, behaviour that violated this basic principle was perceived as extremely detrimental for any engagement in the organisation. Therefore the notion of Respect will be discussed in more detail later.

In this connection it is important to highlight the importance of *direct contact of leaders* to the group. Personal contact combined with an attentive leadership style, as emerged from many interviews, fosters the feeling to matter as an individual and is strongly linked to self-enhancement.

8.2.2 Conditions that enable self-efficacy

The motive of self-efficacy reflects the perceptions of growth, self-actualisation, and being able to succeed. On the most basic level, *involving people in decisions* that concern their own jobs can induce self-efficacy and be achieved through a functioning CI *suggestion system*. Effective suggestions systems are not only of value for the organisation, they have an even greater value for employees: They show employees that they can make a contribution that is valued and incorporated in the organisation. They feel they are able to make an important and lasting contribution to their own workplace. However, as I highlighted through the comparison between Toyota and Multipueblo (see Section 7.2.6 and Appendix F, Subsections 3 and 4), suggestions systems *per se* do not possess the inherent quality to be a source of self-efficacy for group members.

Systematic feedback regarding improvement suggestions and other achievements in a fast manner is the key for team members' perception to "have a voice" and be effective. This can be done either through personal communication or by systematically "tracking" the status of all suggestions on a public board or a similar display. If an implementation is not possible or not economically viable, it is essential that feedback is given to explain why the suggestion was not carried out. In order to be able to implement suggestions for small improvements quickly and thus demonstrate group members that their suggestions are being taken seriously, it is essential that the organisation provides the necessary resources on a continuous basis. The following statement of a leader at MPB encapsulates the feeling of powerlessness that results if necessary resources are *not* being provided:

If you ask me: I know where all the faults of the factory are.... But why are they there? Why have they not been improved? Because I have no time, because I have no people, because they do not give me the means!

Feedback, understood as receiving a response to one's actions, is generally paramount to feel self-efficacious. In work systems of high task interdependence problems can often only be solved through coordinated action across departmental boundaries. If

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no functioning feedback systems are in place, employees can get the impression that – despite their best efforts – problems are not being tackled or taken seriously by leaders or other external bodies. The consequence is often resignation. For instance, in one workshop a participant lamented: “Continuous improvement here means listening to people [referring to cultural theme on card]. That’s ok if the people with whom you’re trying to improve listen, because we are still getting some of the same faults coming through to our area”.

It is important to note that not only the lack of organisational feedback can negatively impact the sense of self-efficacy. In one work group, a computer system that rigidly predetermined routines and left no room for improvements was perceived as a severe restriction of individual autonomy.

On a more advanced level, self-efficacy means that group members obtain a level of **training** paired with **autonomy for action** so that they perceive themselves as competent. For this to work, group members have not only to be trusted with **responsibility and means to make decisions**, but leaders (on all levels) also need the confidence and authority in the organisation to **step back and let go of control**. At best, employees receive dedicated time for CI every week, as practiced at TPN.

Taiichi Ohno, who is often credited with the development of the TPS, explained in this connection:

Through each worker gaining skills in a wide range of technology, each person is able to participate in developing the total system on the production floor and to play an important role. This is how work leads to a sense of self-fulfillment. (Toyota Motor Corporation, 2002, p. 13)

Similarly, Earley and Erez (1997) described **empowerment** as part of a CI initiative as an effective approach to induce self-efficacy in a Western socio-cultural environment.

The quality circle technique idea may work well [in the US] if it is focused on an individual's sense of growth (self-efficacy motive) and personal image (self-enhancement motive). A splendid example of the quality control emphasis used by a

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company is the six sigma approach by Motorola. In this company, there is a very heavy emphasis on training and empowering employees to conduct quality checks for themselves rather than relying on some external body, such as a quality control department. (p. 111)

In this connection it is important to note that Toyota is known for providing long-term *career paths* for blue collar workers to management positions. On the other hand, absence of career perspectives can trigger a feeling of “being stuck” and unable to make progress in one’s life as the following short excerpt from MPB illustrates:

When a person is my boss and she³ does not advance... if my boss does not advance then those below her, they are obviously not going to make any progress [either].... Because you cannot skip the one above you.... It is the hierarchy, isn't it?"

On a related note, Harris, Harvey and Huddart (2005) add that “innovation originates from engaged, empowered individuals who primarily feel they are free to promote stepwise, incremental improvements based on adaptation” (p. 17). As explained above, *comprehensive training in structured problem-solving* methods and experienced leaders are essential. Being able to solve problems conveys a sense of growth and self-determination. One group member at TPN reported enthusiastically:

We have control in our workplace. We have control [of] how we shape it and help and contribute. If something doesn't work well we have a look and see why it didn't work and try to improve on it so it doesn't fall down next time.

Another essential aspect for experiencing this sense of control and self-determination in the group is the perception of being an integral part of the organisation. If an organisation lacks this *cohesiveness*, this may give rise to the feeling of “fighting a losing battle” that can destroy the sense of autonomy.

³ To preserve the participants’ anonymity, female pronouns are use irrespective of the actual gender of the participants, as described in the Introduction.

Regular organisation-wide meetings as exemplified at TPN or the regular **presence of top leaders** in the organisation can counteract these perceptions. Knowing the recipients of one's work makes the purpose of one's activity tangible and ultimately results in more meaningful work.

8.2.3 Conditions that enable self-consistency

The “desire to sense and experience coherence and continuity” (Erez, 2009, p. 621) is at the first glance irreconcilable with continuous change, as implied by the concept of CI. However, this paradox can be solved when one considers that CI implies contributing incremental modifications and thus provides an opportunity for participation in and embracing change in the organisation.

Stability and a **long-term orientation** are pre-requisites for consistency. One of the most fundamental factors to enable self-consistency is highly **stable employment relations**, as exhibited in all Toyota case studies. It is therefore probably not a coincidence that “stability in employment has long been, and continues to be, a key factor in Japanese management theory” (Tackney, 2001, p. 385).

It is worth noting once more that the fieldwork coincided with the worldwide economic crisis in 2009/2010. The situation for Toyota was worsened by quality issues that were widely debated in the media at that time. It is therefore remarkable that none of the participants at Toyota mentioned fear to lose their job (and indeed no lay-offs took place). This reflects the immense and deeply internalised confidence into the **mutually committed relationship** that working with Toyota constituted for the group members. An interview with a Toyota executive confirmed that during the entire period, Toyota had not laid off any permanent staff⁴. Without doubt this is a strong enabler of self-consistency, both on the individual and group level.

⁴ With the exception of the NUMMI joint venture plant, which closed after General Motors terminated the cooperation.

Particularly in discussions during the group workshops, evidence was found that long-term perspective at Toyota is viewed –in accordance with Erez and Earley (1993) theory – not only as a planning horizon but in terms of the stability and consistency it meant to the group members. Accordingly, some strongly control-oriented management practices such as the Daily Control Board at TPN were not perceived as a means of managerial control, but reinterpreted as a means that provided the team members with continuity and stability.

Self-consistency has clear parallels with the concept of “consistency trust”, i.e. “the other party will do what they said they would” (P. S. Adler, et al., 1999, p. 51) as discussed by Adler and colleagues (1999) for the case of the NUMMI Toyota plant. It implies the need for **fact-based decisions** by management. In this view, the imperative for management to base decisions on facts and objective evaluation criteria is not only necessary to reach good decisions by objective standards, but also to convey a sense of constancy in the organisation.

Moreover, **regular meetings** do not only foster group cohesiveness, they are also a way to express constancy and are an integral part of the routines at all Toyota cases. On top of that, they are a platform for communication, to resolve conflicts and involve in decisions.

Although not everyone is involved in *all* decisions, all Toyota groups used highly systematic approaches to redistribute decisions and other information quickly within the organisation to **keep everyone informed** and thus convey a sense of continuity in the relations between the organisation and its employees.

When self-consistency is understood to extend to a sense of continuity in social interactions, i.e. the feeling of relatedness or social embeddedness, the importance of many **team activities** becomes clear. They convey a sense of cohesion and stability in both the team and the organisation. They help team members know their colleagues as human beings and not only as co-workers.

To be able to perceive CI as part of one's day-to-day work thus experience self-consistency, ***dedicated resources*** on the part of the organisation for running CI activities are essential. The comparison between TMD and MTB can serve as an excellent example: While at TMD one person is exclusively in charge of coordinating CI activities, at MPB responsibility "to make CI work" was assigned on top of existing tasks. Accordingly it receives little or no attention when the "pressure is on". An excerpt from a MPB leader demonstrates the resultant frustration:

One must have enough resources.... But if whenever we have a crisis what we do is attack the resources which are easiest to count, that is the people, then we make a mistake.... Then you are attacking the basis that supports the system.... What you do is... you create... distrust among the workers left, because you yourself have drained the confidence in what you said before, we've had here this experience with implementing 5S and TPM.

If CI is not institutionalised through performance measures and a corporate philosophy such as is the case at Toyota, ***top management's conviction*** in CI is paramount, because top management is ultimately responsible for the allocation of resources. The same leader at MPB observed:

These ideas [about CI] need to be made from the basis of conviction..., the field needs to be fertilized with conviction, otherwise the seeds you sow soon die... Because otherwise... only the tools remain which, if not useful to the workers are seen as worthless.

8.3 Processes Through Which Meanings Become Shared

Underlying research question:

What are the processes through which these meanings are shared and ultimately become a group's culture?

In the previous sections I discussed how individuals develop meanings in relation to CI concepts and practices through the experience of self-motives. This section works

to explain how these *individual* meanings are being *shared* and ultimately become the group's *culture*. The observed effects constitute emergent properties of cultures of CI and reflect intimately the concept of duality of culture – cultural meanings are not only the result of individual cognitions, but also of social processes.

The first subsection works to emphasise the implications of the cultural perspective in terms of meaning-sharing and presents the argument for the adoption of a systems perspective. The subsequent four subsections describe four distinct effects which lead to the existence of shared meanings that I identified across the cases.

8.3.1 A systems perspective to understand meaning-sharing

Job Design Theory (Hackman & Oldham, 1976) is a seemingly similar approach when compared to a cultural perspective that investigates the meaningfulness of work. However, it looks at the work environment as an extrinsic variable that can be engineered⁵ to optimise its effectiveness for work motivation and outcomes. In contrast, in the cultural perspective it is not enough to see individuals as passive recipients of stimuli from a work environment. The construct of culture implies that this environment is *actively created by its members*.

In other words, if an organisational culture is understood as a shared meaning system, group members do not only experience culture, but they actively contribute to its maintenance through their meaning-making and sharing. Lowe (2001) explained in this connection that “human living systems have 'culture' as an emergent property” (p. 325) and recommended an open systems approach for a holistic understanding of culture.

Like Conti (2006), who drew the connection between culture, systems thinking and QM, Lowe proposed a systems perspective for the analysis. Similarly, Yamagishi and

⁵ In Job Characteristics Theory (Hackman & Oldham, 1976) meaningfulness of work is defined in terms of skill variety, task identity (“the degree to which the job requires doing a whole and identifiable piece of work from beginning to end” (Oldham & Hackman, 2010, p. 464)) and the significance of a task.

colleagues (Yamagishi, et al., 1998) brought forward the idea that culture can be understood as a system in equilibrium. In their view, members in a collectivistic cultural system are rewarded for behaviours that maintain the cultural system.

A systems perspective seems appropriate to intellectually “unpack” the processes through which meanings are shared and thus lead to the emergence and maintenance of the group culture, hereafter referred to as *enculturation*⁶ process. Merriam-Webster (2011) defines enculturation as “the process by which an individual learns the traditional content of a culture and assimilates its practices and values”.

Put another way, enculturation is the process of adopting meanings from the social environment and thus *becoming part of and contributing to this cultural environment*. I have identified four specific effects in the dynamics of enculturation: Self-selection, staff selection, behavioural embedding and socialisation. I will discuss them in the following sections.

8.3.2 Self-selection effect

As shown above, engagement in CI can fulfil self-motives and consequently entail an increased feeling of self-worth. The self-selection effect is based on the insight that while CI can be thus inherently *rewarding*, it also implies substantial *emotional, social and cognitive investments* on the part of the individual. The degree to which an individual experiences engaging CI as meaningful will vary depending on, *inter alia*⁷, the match between his or her own configuration of self-motives and the specific characteristics of CI practices.

On the other hand, the investments of being part of a CI culture on the part of the individual include, but are not limited to:

⁶ I acknowledge that the first two effects do not involve enculturation in the strict sense of the words, but are included summarised in this category for the sake of brevity.

⁷ Personal bonds to other group members, preference of leadership style, and task characteristics are other criteria.

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- Added responsibilities and roles in the group and cross-departmental projects;
- Cognitive engagement in improvement suggestions;
- Conformance to work standards and rules;
- The readiness to continuously adapt to an evolving work environment;
- Acquisition of additional skills.

Therefore an individual will choose to continue to engage in that culture of CI only if the trade-off between an increased feeling self-worth on the one hand, and social and cognitive investments on the other, is favourable for him- or herself.

In turn, if in the perception of the individual the cognitive and social investment outweighs the sense of self-worth, he or she is likely to choose to leave the organisation or group. A Toyota executive observed in this connection: “We recruited a lot of good young people. And not all of them were able to integrate into this culture. But these people will disappear again actually.... But usually they leave the company on their own again.”

What results is effectively a staff self-selection process in which, in the long run, only those individuals who experience CI as highly meaningful for themselves and consequently share similar meanings with group members, will choose to remain part of work group. This mechanism explains a dichotomy that emerged consistently in several interviews with Toyota executives: Employees either stay with the organisation for a very long time, often many decades, or choose to leave after a short time of only several months.

In this logic, the decision to opt out can stem from three different reasons:

- a) CI as practiced in the respective organisation is not aligned with the individuals configuration of self-motives and thus not experienced as meaningful (Erez & Earley, 1993);
- b) The emotional, social and cognitive investments involved in CI such as “coercive” standardisation and conformance to behavioural norms constitute a

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sacrifice to an individual's personal preferences that he or she is not willing to make (compare Appendix J, Subsection 1 and 2 for examples);

c) A combination of both.

The related concept of person-organisation-fit can be found frequently in the literature. For example, Adebajo and Kehoe (1999) found in a study about organisational cultures of CI in UK organisations the companies that developed quality cultures most successfully were those whose "employees settled comfortably into the new culture" (p. 640). In this context, Earley (1993) observed that "matching individuals having similar traits and backgrounds with one another can influence group identification" (p. 343). In this context, Ahmed, Loh and Zairi (1999) also noted:

Organizational culture... is difficult to change because people who are attracted to the organization may be resistant to accepting new cognitive styles. When a change is forced, those persons attracted by the old organization may leave because they no longer match the newly accepted cognitive style. Among other things, this culture-cognitive style match suggests that organizational conditions (including training programmes) supportive of learning will be effective only to the extent that the potential and current organizational members know of and prefer these conditions. (p. 429)

Thus self-selection processes in an organisation imply stability (i.e. self-preservation). However, they also inevitably result in inertia and a high degree of uniformity amongst the staff. In this connection, on two unrelated occasions, Toyota executives lamented during interviews that employees tended to come up consistently with very similar ideas, e.g. at brainstorming sessions. A similar observation was broad forward by Mehri (2006). In other words, the downside of staff self-selection processes may be a lack of diversity in terms of personalities and cognitive styles within CI cultures.

8.3.3 Staff selection effect

The second effect that played a significant role across the Toyota cases is based on staff selection on the part of the organisation. More precisely, staff is selected according to criteria that go beyond the immediate requirements of a job (see Chapter

7.2.1) in order to achieve a person-(CI)-organisation fit (Y.-T. Lee, Reiche, & Song, 2010). The findings provide ample support for this effect; all Toyota cases use selective hiring practices in one form or another: While TMD and TPN employ temporary workers and then only provide unlimited contracts to a small number of carefully selected workers, TTH selectively re-employed staff in the transition from the assembly to refurbishment operation.

As the literature shows, highly selective hiring practices are by no means the exception at Toyota: For example, the company assessed 100,000 applicants for an initial 3,000 jobs at the Toyota Camry assembly plant in Georgetown, Kentucky (Liker & Meier, 2008, p. xvi).

It is important to note that also Multipueblo had the opportunity to selectively retain staff through “selective down-sizing” during the considerable layoffs in the economic crisis. However, they applied different criteria unrelated to its organisational culture in the selection process. In contrast, Toyota did not lay-off employees despite the severe company crisis to retain its culture.

In this context, while a causal link between the salience of different self-concepts and the conduciveness to CI is not claimed, it is striking that the average salience of the personal self of Toyota work group members in this study is markedly lower than at Multipueblo (see Table 20), a fact which also points toward a selection process. In this connection, a Toyota executive described the “ideal” Toyota employee: “It is one that already has high standards in what she does ... she fights for a cause and not so much for her ego.”

8.3.4 Behavioural embedding effect

Referring to Schein (1985), Bessant, Caffyn and Gallagher (2001) aptly described how organisational values find an expression in practices as “process in which underlying beliefs and values become enacted in particular behaviours which in turn generate artifacts which reinforce the beliefs and behaviours” (p. 70). These artefacts include, for instance, a clean factory floor and tidy workplace which were consistently found at

the Toyota cases. In this view, housekeeping (5S) is more than a requirement of health and safety regulation or efficiency; it symbolises that things are (and need to be done) in a clean, consistent and systematic way. Another example of encoding meanings in management practices is job rotation as practices at TMD, which was discussed in more detail in Chapter 7.2.2.

Saka-Helmhout and colleagues (2009) depicted how practices guide meanings within a group: "Actors perceive the meaning of new practices and infuse their actions with meaning based upon these perceptions" (p. 4). As the example of the "Daily Control Board" at TPN shows, practices *per se* do not embody meanings: This instrument of managerial control – paradoxically – was perceived as enabling individual self-determination by "keeping everybody informed". This suggests that people develop meanings within the cultural context: In TPN's egalitarian and fairness-oriented culture, it is difficult to find a cue why the Daily Control Board should be an instrument of managerial "domination" and is thus perceived as an enabler of, rather than restriction to individual autonomy. Put another way, the existing meaning system of a group affects the attribution of new meanings. This leads over to the next effect.

8.3.5 Socialisation effect

"Cultural control... through socialized, informal communication and management training of expatriates in staff positions" as described by Saka (2004, p. 220) did not play a significant role in any of the work groups studied. On the other hand, social interaction *did* play a major part in what I call the "socialisation effect" because it relies on the social dynamics of meaning-sharing within the group. The culture is the result of a largely subconscious group learning experience; learning takes place through participation in social processes within the group.

Lowe (2001) suggested that "culture... is conceivable as an organization of meanings that emerge from the process of interaction of its members, using information as a relation or carrier of meaning" (p. 325). Similarly, Hamada (2000) described culture as an emergent, collective process of meaning configuration: "Through enculturation

in particular traditions such as quality culture, people internalize a previously established system of meanings and symbols that they use to define their world, express their feeling, and make their judgements" (p. 301). Indeed, substantial evidence was found of practices that routinise social interaction, both within the group and at the unit level, especially at TPN.

More specifically, Erez (2010) noted that "culture is a shared meaning system (Erez & Earley, 1993). At the team and organization levels team processes of communication, coordination, and interpersonal interactions facilitate the creation of a shared meaning system" (p. 394). In line with this, Hattrup, et al. (2007) found that "training and socialization might be designed to encourage the development of collectivist values and beliefs about working with others, and this may contribute to greater work centrality" (p. 255).

According to my observations, communication within the group is a core aspect of the socialisation effect. It takes place on different levels, often simultaneously: Firstly there is the exchange of factual information, such as upcoming orders, delivery schedules, past performance data etc. But secondly, there is the exchange of "experience realms" and meanings between groups and individuals. Regular and frequent team meetings that go beyond formal group coordination institutionalise such social interaction and enhance group cohesion. In this context, Erez (2010) adds that "giving help increases when the relational aspect is built into the team, when team members know their peers as human beings and not only as employees, and when giving help makes their own work more meaningful" (p. 395).

Core elements in the socialisation effect are expectations about adequate behaviours of other group members. They cause conformity pressures within the team and create a social environment that fosters certain behaviours and meanings while discouraging others. For instance, the phrase "not to let the team down" was commonly used in different varieties across the Toyota cases to encourage desired behaviours.

Relationships of trust enable open communication and are essential for the willingness to co-operate and find consensus. A core element to establish such

relationships is the willingness to break down and solve problems together, improve work relationships and reduce social distances within the group. Remarkably, these themes were clearly reflected in the relationship-oriented reinterpretations of CI (see Table 21).

Another aspect underlines the outstanding importance of relationship-oriented reinterpretations for the group culture: These meanings do not only involve the person herself, but include other team members in it. Consequently, they do not only give a meaning to one's own behaviour, but *embody social expectations about the behaviour of others* and thus ultimately contribute to the socialisation effect⁸.

Moreover, people who attached relationship-oriented meanings developed also non-relationship-oriented meanings, but not the other way around (see Figure 32). In this logic, individuals who consider others in their meanings are more strongly integrated in the group's culture. This is consistent with the fact that employees with longer job tenures developed on average more relationship-oriented meanings.

By not adopting the group's meanings and conforming to the group's expectations, group members are likely to experience social pressures and a feeling of alienation, as I observed in one work group. Thus each group member's meanings collectively create a social environment that, in turn, fosters the adoption of the group's meanings by others. The circularity in this logic can help to understand the stability of cultural system. Consequently, the stronger the homogeneity and explicitness of meanings in the group, the stronger will the socialisation effect be.

8.4 Shaping Behaviour Toward Continuous Improvement

Underlying research question:

How do these shared meanings guide action toward CI and which role does a corporate philosophy play in that process?

⁸ Therefore it is adequate to include reinterpretations of „Respect“ in the analysis of relationship-oriented and non-relationship-oriented reinterpretations, as shown in Table 21.

This section discusses how shared meanings guide action toward CI. It develops the central idea that in effective CI cultures group members fulfil their self-motives by engaging in CI so that there is a congruence between individual interests and the organisational interest. To guide action toward CI, organisations consequently have to provide the conditions that enable the fulfilment of self-motives (Subsection 1) and enable enculturation effects (Subsection 2). Due to its outstanding importance in the observed group cultures, the third subsection discusses the function of the corporate philosophy TW.

8.4.1 Enabling individual experience of self-worth through self-motives

Sinclair and Collins (1994) asserted that to “encourage workers to take a personal responsibility for quality... is a problem which goes to the heart of TQM philosophy” (pp. 19-20). More generally, scholars suggested that the nature of CI approaches required individuals to subordinate their individual interests to the organisational interest (Spencer, 1994).

I argue, however, that in an effective organisational culture of CI there is *congruence* between individual interests and those of the organisation. Erez and Earley’s (1993) cultural self-representation theory helps resolve this paradox: A culture of CI enables group members to pursue and satisfy their self-motives while engaging in CI.

Congruence between individual self-motives and organisational interest is a point not unlike the one made by Deming (1986): Many of his well-known 14 points “for the transformation of industry” are aimed directly at the improvement of the work environment and reflect – when read from the angle of employees – individual self-motives. In other words, when CI is implemented effectively, organisational interests for efficiency and effectiveness, on the one hand, and individual interests in terms of self-motives on the other hand, become interwoven. Thus *organisational interests are pursued by fulfilling individual self-motives*.

From this follows that organisational leaders should try to understand practices of CI through the perspective of individual self-motives when they implement CI in an

organisation. It would be a mistake to just assume that employees' interest are (or have to be) identical with the organisational interests by default.

This context-bound approach to selecting adequate practices is based on psychological incentives rather than penalties to steer behaviour within the group. As the following excerpt from an interview with an MPB team leader illustrates, a “forced” implementation of CI has little chances of success:

Management at Multipueblo is a management that thinks of improving, right? It's considered to be our duty! Improving continuously, right? ... For me it should be approached in another way, the fact that people could improve constantly should be motivating... the possibility should be there.

Therefore for CI to work, an organisation needs to provide the structural conditions that enable self-motives and develop adequate measures to counteract dysfunctional effects.

8.4.2 Enabling enculturation

This section describes the implications from the enculturation effects that were identified in Section 8.3.

8.4.2.1 Enabling self-selection

Paradoxically, to allow self-selection to be effective, an organisation needs to uphold hurdles that require cognitive and social investment in CI, rather than lowering these entrance barriers. Otherwise individuals that experience CI as *not* meaningful will have no incentive to leave the organisation and will eventually “dilute” the group culture of CI.

In concrete terms, this means that new staff needs to be heavily exposed to CI practices in order to enable individuals to probe whether they experience CI as meaningful and thus fit in the CI culture – or not. The organisation should continuously foster engagement in CI activities; comprehensive and regular training in CI practices should be carried out.

8.4.2.2 Enabling staff selection

To build a group culture of CI, the focus of human resource policies needs to shift from assessing applicants in reference to the job profile alone toward a holistic evaluation that incorporates person-culture-fit. Needless to say that people in leadership positions have key importance in the process (Schein, 2010). Furthermore, the organisation needs to provide an “escape route” such as temporary employment for staff to facilitate selection.

8.4.2.3 Enabling behavioural embedding

Practices of CI are not only purpose-bound activities but also “carriers” of culture, in the sense that they have the capacity to configure the meaning system of a group. They can perpetuate existing meanings in the organisation or incorporate new ones, as the example of job rotation at TMD illustrates (see Section 7.2.2). Although there is no hard-and-fast rule as to which practices to apply and when, Bessant, et al.’s comprehensive work (2001) gave some advice about key feature of routines that embed CI in an organisation (p. 72), which were found in a very similar form in the work groups studied in the present study:

- Active involvement of all members;
- Absence of blame;
- Formal problem finding and solving;
- Response to improvement ideas in a systematic and timely fashion.

The meaning of certain practices, however, is not a static property/feature. As discussed before, it is rather in a permanent state of coming-into-being through ascription of meaning by organisational members.

8.4.2.4 Enabling socialisation

For socialisation to take place, interpersonal social interaction and communication are paramount. A useful way of thinking about organisational culture (that I also used in the data coding process) is in terms of an emitter-receiver process: All individuals are cultural receivers – they subconsciously evaluate their organisational environment

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and ascribe meanings according to internalized criteria, many of which are cultural in nature. In addition, some organisational members are – to a varying degree – cultural emitters, in particular leaders. But the workshops showed that also other individuals can assume leadership roles when the need arises (like in the workshop situation, when there was no formal superior present) and become cultural emitters.

Sharing common (group-level) goals increase identification with the team. In line with that, rewards and recognition at Toyota were given for desired behaviours and not outcomes alone. Leaders act as facilitators of meanings of the group culture within which the individuals are embedded. The case TMD illustrates how the values of the TW can be used to purposefully construct meanings and create expectations (see Section 7.2.4). Cognitive engagement and task interdependence, intensified through job rotation, also facilitate the development of shared meanings (Erez, 2010).

This view highlights immediately the importance of leadership. Leaders are an essential link in the feedback loop that is indispensable for experiencing growth and efficacy. They also set strong examples of behaviour and attribution of meaning in a group (for examples, see Section 7.2.4). For instance, they can convey the meaning of organisational slogans (like the sign “work smarter - not harder”) to fellow group members. Literally they can *embody* norms such as “Respect”.

Leaders in this study also used metaphors such as the job title of “team captain” to induce or invite positive meanings by using the similarity to other things with a generally accepted favourable meaning. This is similar to an example in which d’Iribarne (2002) describes how a successful implementation of TQM in a Moroccan electronics firm was achieved by blending it with Islamic norms and values, and using persons in authority positions as role models. He explained pointedly that “this reform was acceptable because local employees interpreted it as meaningful with respect to their culture. Everyone gave their support when the leader provided a model that the local community could embrace” (p. 248).

8.4.3 A social catalyst: A shared philosophy

Toyota's corporate philosophy emerged in all Toyota case studies as an important variable in the emergence of the system of meanings. Therefore it can be viewed as a cornerstone in the effective implementation of CI in these cases and will be discussed in some detail in this section.

8.4.3.1 Construability

A central characteristic and strength of the TW is that it allows many diverse ways of looking at it. As Table 21 shows, the notions of CI, Respect and the TW in general can mean very different things to different people. Particularly the notion of Respect is a concept that can still be filled with context-specific content. These multiple interpretations can cater for different individuals.

The ways it is interpreted reflects the cultural context from which it is looked at – meaning is created locally. It provides enough room for "local" reinterpretation to make a term meaningful in a variety of different contexts. For instance, Respect for people in both NZ cases (highly individualist societal cultural contexts) had the connotations of to “leave room for individuality” and “respecting autonomous decisions” and creativity (absence of strongly standardised work), whereas at TMD it was more about good manners that allow everybody to do his or her job, without pronouncing much the aspect of individual freedom. In other cultures the Respect might be interpreted in yet another way.

A TMD supervisor explained her view:

The issue of social respect... is not the same in Spain as in Japan.... It isn't, in Japan they are way more respectful, already physically, physically the Japanese greeting is different.... We shake hands, it is more touching, more like “Right come on mate!” It is much closer [here].

In connection to this, Hofstede and Peterson's (2000) explanations that "organizational cultural practices that originally reflected a particular set of values in

the home country will be reinterpreted in light of local values when these practices are transferred abroad" (p. 412) are consistent with my observations.

8.4.3.2 Shaping meanings and behaviours in subtle ways

The TW is a powerful instrument for organisational leaders to shape the meaning system of the group in subtle ways. Especially the findings from TMD showed how the corporate philosophy is purposefully used to induce desired behaviours.

While the official content of the corporate philosophy in all Toyota cases is the same, the enactment can differ, as the case descriptions show. There are, however, commonalities in the functions the corporate philosophy performs:

- It provides social norms that create order in the group;
- It provides guidance for problem-solving;
- It provides dependable criteria for staff selection;
- It helps leaders gain legitimacy for decisions;
- It facilitates exchange of information within the group;
- It regulates cooperation between group members;
- It helps balance tensions and mediate between workers and management;
- It allows leaders to give critical feedback to group members while maintaining social relations intact.

Thus the function of the corporate philosophy can be thought of as a cultural catalyst, filter or amplifier within the group. However, it is clear that when the corporate philosophy is used to define adequate behaviours and endorse values in a group, they apply equally to all members, including leaders. Situations where there is a discrepancy between the managerial rhetoric and actual behaviour can easily invite cynicism and undermine the effectiveness of the corporate philosophy.

8.4.3.3 Respect

The "Respect-for-human-system" was discussed as early as 1977 as an essential part of Toyota's production system (Sugimori, et al.). In its most basic form, Respect refers

to good manners in the treatment to individuals. By allowing people to maintain a positive self-image, it supports directly the motive of self-enhancement.

In the Toyota cases, the notion of respect acted as the suspension point of interpersonal relationships. In concrete terms, a respectful behaviour of each group member contributed to a work environment in which respect is the cultural norm.

In contrast, at MPB the effect of a lack a corporate philosophy is visible: While the notion of Respect can be used at TMD to claim punctuality from all group members, at MPB there is no such binding norm; complying with work commitments is often only the result of personal relationships within the group.

In summary, the TW constitutes the “institutional pillar” that is a strong cohesive force in each of the Toyota work groups – team members speak “a common language” when it comes to CI and Respect for People.

8.5 Differences and Commonalities Across Cultural Boundaries

Underlying research question:

How does societal culture impact the shared meanings in organisations?

This section discusses the role of the surrounding societal culture for the shared meaning systems in the organisations. It is organised in reference to the relevant theoretical perspectives identified in the review of the literature: The first subsection discusses the observed differences between the cases by comparing organisational culture and societal culture influences. The second examines the group culture with regard to a culture-universalist viewpoint and discusses the plausibility of “one best way”, that is, a single “ideal” organisational cultural profile for CI. The third and last subsection examines the findings based on the notion of “cultural fit” or value congruence between organisation and societal culture.

8.5.1 Societal versus organisational variables

Generally, the cases provided support for the assertion that the internal organisational culture is shaped by the larger societal culture in which it is embedded. While the NZ cases TPN and TTH (that had been chosen for literal replication in terms of both organisational affiliation and societal context, see Figure 42) indeed exhibited similar characteristics, the group cultures TMD and MPB, on the other hand, were markedly distinct.

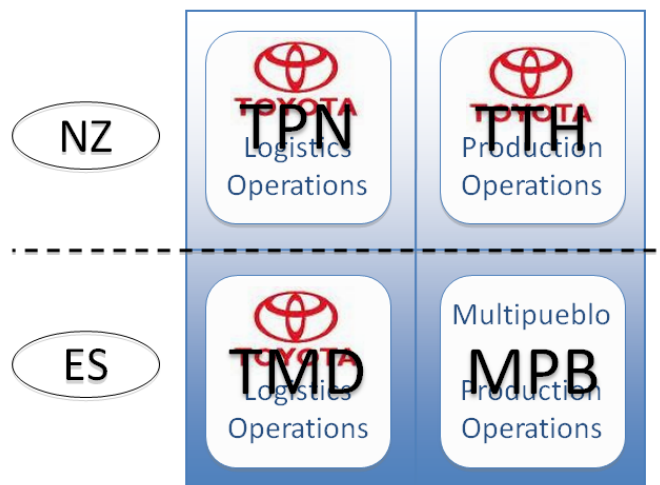


Figure 42: Multiple-case design

In the NZ cases, societal values of fairness and equality played a strong role in the group cultures, expressed by “a preference for egalitarian working environments, often leading to a vivid dislike for status differences” (Harris, et al., 2005, p. 17). Similarly, the importance of integrity of leadership and high works ethic were salient themes in NZ but not the Spanish cases, although the conditions in the Spanish works groups would by no means provide less justification for such concerns. Thus the host-cultural context can, to a certain degree, explain the commonalities between the cases.

However, societal culture shapes organisation-level culture only indirectly, for instance, through social interaction between group members and the relationship of group members to the organisation: Between the Spanish cases TMD and MPB on the one hand, and the NZ cases TPN and TTH on the other, there is a clear difference in how individuals relate to the organisation in which they work. In Spain, corporate

bonds at both Toyota and Multipueblo are weaker in comparison with the NZ cases. The attachments of Spanish group members are not to the organisation but with the people (MPB) or through norms (TMD), if at all.

In contrast, the corporate bond of a shared philosophy, i.e. the corporate philosophy, is not a guarantee for similar meaning system across societal cultural boundaries: The comparison of the NZ cases on the one hand and TMD on the other, demonstrates that even a rigorously implemented corporate philosophy leaves leeway for local interpretation. However, it should be noted that the Spanish cases MPB and TMD were also markedly different from another.

Thus, as particularly the case TMD demonstrates, managerial practices and concepts can still have a significant impact on a group's meaning system. In fact, the greatest differences between organisational cultures of CI were observed between the cases TMD and MPB, which were located in the same socio-cultural context – not least due to the influence of the Toyota Way at TMD. Perhaps it is adequate to say that the societal culture defines the manoeuvring room in which an organisation can act.

However, one constant across the cases is that the concept of CI is being perceived as meaningful by the vast majority of group members; more specifically by contributing to the fulfilment of individual self-motives of enhancement, efficacy and consistency. This is in line with Robert, et al. (2000), who find CI to be significantly associated with job satisfaction irrespective of the societal culture (US, Poland, India and Mexico). Therefore I agree with proponents of CI approaches such as Deming (1986) in that a culture of CI is principally feasible in diverse societal contexts.

8.5.2 Is there an “ideal” culture of CI?

Although two of the highly effective group cultures of CI had similar characteristics (TPN and TTH), the remaining Spanish cases were markedly different. Particularly the comparison between TPN and TMD indicates strongly that there is no “one best way”

or “ideal organisational culture profile” for CI⁹. The comparison between TPN and TMD shows that group cultures can have identical operational characteristics (size, task type, task interdependence, etc.), exhibit virtually identical and outstanding levels of performance and CI effectiveness (as measured by objective performance measures), be even part of the same international organisation and yet have entirely *different* group cultures.

TPN and TMD indeed represent different cultural archetypes (see Appendix F for a detailed analysis of both group cultures). TMD leaders make no attempt to provide meaning beyond the sphere of work. The work system is purposefully “depersonalised” through job rotation and the elements of Respect and Teamwork of the TW are used to balance this depersonalisation. At TPN, in contrast, meaning-making through slogans and humane leadership clearly tries to “reach the human side” of employees. Thus the findings across the diverse case contexts clearly contradict the culture-universalist assumption of “one single ideal culture profile of CI”, at least when considering work groups located in multiple societal contexts.

In contrast, the comparison between TPN and TMD suggests the validity of a culture-specific position, which receives additional support when incorporating TTH in the rationale: TPN and TTH exhibit similar group cultures and are located in the same societal context. However, when comparing the cases within the Spanish societal context, the picture is less clear: TMD and MPB are strikingly different. Some the differences between TMD and MPB can probably be attributed to the distinct levels in CI maturity (MPB’s CI maturity is lower), but the fact that they follow a fundamentally different approach to organising casts doubts on the culture-specific perspective.

8.5.3 Does effective CI require “fit” or value congruence between organisational and societal culture?

As the comparison between the cases TMD and MPB demonstrates, managerial practices do not necessarily have to be employed in ways that sustain existing societal

⁹ At least if the work groups are not embedded in the same societal context

values to be effective. Although at MPB, work relationships, leadership style and managerial practices are well-aligned to the societal culture, performance measures in terms of CI maturity indicate much room for improvement. TMD, in contrast, with its “counter-cultural” managerial practices based on job rotation, features exceptional levels of CI maturity and performance (see Appendix F).

These results do not lend support to the idea that congruence between organisational and societal culture is a necessary condition to achieve CI effectiveness, which is at the basis of the culture-fit model (see Gelfand, et al., 2004, p. 447; Sousa-Poza, 1999).

Instead of a basic model of fit between the organisational and societal culture, I argue, more sophisticated theories of fit that can account for individual and cultural diversity within the workforce are more useful. One example is Erez and Earley’s (1993) theory of cultural representation, which attributes central importance to the alignment of practices with culturally moderated self-motives of individuals. In this sense I agree with Erez and Earley (1993) who asserted that “the differential implementation of managerial techniques in different countries is not a coincidence. Rather it reflects the contingency between the potential effectiveness of certain managerial techniques and cultural values” (p. 36), although this contingency might be a complex one.

8.6 Implications, Transferability and Limitations of Findings

This section describes the conceptual implications, transferability and limitations of the present study.

8.6.1 Implications for conceptualising CI

If a culture of CI is effective because it provides meaning to its members by contributing to self-motives and ultimately a feeling of self-worth, this has significant implications on the way CI should be conceptualised.

In the past, authors highlighted the role of CI for organisational effectiveness and efficiency. For instance, Wynder (2008) viewed CI primarily as a cost reduction tool in organisations. Similarly, Ni and Sun (2009) describe CI in reference to Boer, et al. as a “planned, organised and systematic process of ongoing, incremental and company-

wide change of existing practices aimed at improving company performance" (p. 1043). While I fully agree with the first part of the definition, the second part "aimed at improving company performance" is not so clear. Agreed, the ultimate *raison d'être* of CI is organisational effectiveness, but CI in the case studies was geared toward self-motives of the organisational members – and the improvement of organisational effectiveness was in many instances only an *indirect* consequence. Therefore future conceptualisations of CI should more strongly reflect the cultural and behavioural implications of CI.

8.6.2 Transferability

The purpose of this section is to acknowledge the confines of generalisability by stipulating the boundary conditions, i.e. the conditions under which the findings can be expected to hold.

Hill, Nicholson and Westbrook (1999) claim for case-based research that "carefully delineated inductive reasoning can lead to claims for generalisation no less valid than those made for other methods" (p. 153). However, it is evident that the *generalisability* of the findings of the present study is limited. This study was not conducted on a representative sample but on only two – specifically selected – organisations. This was possible because the aim of this study is *not* to investigate statistical frequencies or explore *all* possible types of organisational cultures that are conducive to CI. Instead, its aim was to study the features of group cultures of CI that can arguably be considered exemplars of such cultures.

As explained by Sackmann (2001), findings that are applicable beyond the specific case can only be made through purposeful comparison of matched cases and careful reasoning. The cases studied here provide some evidence that the latent principles – self-motives underlying the individual attribution of meaning and different enculturation effects – are similar across diverse settings. However, the cross-case comparison has also identified greatly varying cultural archetypes each representing a fundamentally different way of anchoring CI in a group's culture. By implication, this

study cannot claim to cover *all* culture types that are conducive to CI but only the underlying principles of *some*.

Also, it should be noted that the groups investigated here can be described as mostly closed cultural systems: Their interaction with the cultural environment was strictly limited and they were conceptualised and studied accordingly. In other industries, where there is a permanent exchange with the group's environment in terms of customers (service industries) or even employees (such as seasonal work) the findings may not be applicable.

Therefore the term "*transferability* of research findings - specifically, under similar conditions, similar outcomes can be anticipated" (Boyacigiller, et al., 2004, p. 119, emphasis added), is more adequate than *generalisability*. However, I argue that the findings are significant and have implications beyond the observed cases. More precisely, I argue that the latent principles are likely to be similar in other settings, but local conditions such as the dominant CI concepts and the configuration of self-motives within the group, leadership styles, task types, as well as the history of the group will modify the concrete manifestation or shape of a culture.

8.6.3 Limitations

8.6.3.1 Imperfect match of case studies and access

The group cultures I studied were the result of many complex and intertwined technical, strategic, historical and social aspects, both inside and outside the work groups. Although I have taken greatest care to match the case studies in order to arrive at valid conclusions, certain factors remained beyond control, such as leadership styles or the average educational levels.

Especially gaining the necessary access to organisations proved to be a challenge in more than one case. There was an inherent trade-off between the level of access and the quality of the match between case studies in terms of the case replication logic. For instance, TMD constitutes a case where I made a decision in favour of a better

match, while MPB allowed much more in-depth access at the expense of matching characteristics such as industry and overall organisation size.

8.6.3.2 Data collection methods

Field-based data collection gains relevance at the expense of experimental control. For instance, procedural consistency between workshops was sometimes difficult to ensure, when compared to laboratory experiments. Each of the workshops developed its own dynamics that resulted also from situational factors and the group composition. While these dynamics can lead to highly relevant insights and should therefore also be seen as a key strength of this inductive method, they also complicated systematic analyses. Likewise, the conditions under which the TST was conducted were not as consistent as they would have been in a laboratory setting.

It is important to understand that the interviews were conducted within a case study logic: While the findings are not generalisable to a wider population, they *are* assumed to be representative for the work groups I chose as units of analysis. As explained in Chapter 5 “Research Design”, interviewees in the case studies were purposefully selected to span a wide range of different group members and the number of people interviewed in-depth constituted half or more of the total work group members. In this sense they were *not a random sample* of a wider population but practically *constituted* the group.

Clearly, in an ideal world I would have interviewed 100% of the members of each group to reach more substantial samples and be able to evaluate statistical significance of the observed patterns in the data. The participation of *all* group members of each case study in both interviews and the workshop would have been desirable, but was not feasible due to resource constraints on both myself and the participating organisations as well as for ethical reasons – not every group member gave consent to participate in all parts of the study.

Moreover, I would have conducted more case studies (particularly in the Spanish cultural context). Again, resource constraints as well as lack of suitable (i.e. matched)

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case studies unfortunately prevented this. Therefore future research is needed to determine the extent to which the findings transfer to other settings – both in terms of organisational and societal culture.

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9. Conclusion and Future Research

If you want to get people to behave as you (and often they) believe they ought, an easier route [than changing people's attitudes] is to encourage them to seek out situations that will bring their best behavior in them and to shun those that will encourage bad behavior.

(Nisbett, 2003, pp. 207-208)

9.0 Introduction and Overview

This study provides an alternative view on organisational cultures of CI. Instead of regarding them as organisational variables that can be calibrated through managerial intervention, I have attempted to look at group cultures through the eyes of the employees and discern the underlying principles. Culture was understood as something an organisation *is* rather than an organisational property at the disposal of management (Smircich, 1983a); it was conceptualised as a shared meaning system and studied accordingly. If an organisational culture of CI “constantly guides organizational members to strive for continuous improvement” (Ahmed, et al., 1999, p. 426), I argued, it is important to understand the meanings that constitute such a culture.

It is now appropriate to summarise the central conclusions of the study. This chapter follows the same basic structure as the previous Discussion Chapter; each main section corresponds to a research question.

9.1 Cultures of CI Contribute to an Individual’s Feeling of Self-worth

The analysis started from the recognition that an organisational culture as a shared meaning system emanates from the individual attribution of meanings. Therefore I probed the social self-concept of interviewees in order to contextualise individual meaning-making and better understand the extent to which meanings are a function of internalised values.

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Consistent with cultural theory (Erez & Earley, 1993), I found a clear pattern between the internalised individual cultural values (in terms of social self-concept) and attribution of meaning to CI concepts and practices: Individuals across the cases that included others in their spontaneous self-description tended to understand CI as something that is about social interaction or involvement of others. On the other hand, individuals who did not use social references in describing themselves were prone to understand CI as something that is primarily about themselves and does not require involvement of others. Thus the results indicate that the social self steers meaning-making: Individuals organise their meanings of CI on the basis of how they view themselves as part of the social world.

The next step of the analysis discerned the main themes of the meanings that group members attributed to CI. Although the individual meanings varied widely, Erez and Earley's (1993) cultural self-representation theory helped interpret the patterns among these themes: The meanings people ascribe to CI concepts and practices inherently reflect individual self-motives, regardless of the location of the CI group culture. These psychological self-motives are enhancement, efficacy and consistency; according to theory, these self-motives are important for experiencing wellbeing and self-worth across cultures.

What the individual meanings across the diverse case settings had in common is that they reflected one or several self-motives. By expanding the meaning of CI concepts and practices beyond the trivial and relating them to their own self-motives, group members make everyday work life meaningful and self-relevant. Engaging in CI activities becomes "subjectively meaningful to them in a coherent world" (Berger & Luckmann, 1966, p. 33). However, it should be noted that not all group members experienced CI as equally meaningful.

Nonetheless, there were significant differences between the case studies in the extent to which group members developed such meanings.

9.2 Conditions That Facilitate Individual Meaning-Making of CI

Because attributing meanings to CI is the result of experiencing self-enhancement, efficacy and consistency, it was essential to identify the necessary conditions and organisational features in the work groups that allow people to fulfil these self-motives.

The cases provided ample evidence of the conditions and organisational features that enable people to fulfil these self-motives and thus assist them in the development of these meanings. In this view, a culture of CI is an organisational culture that provides the conditions that allow its members to increase their personal wellbeing by means of fulfilling self-motives of consistency, efficacy and enhancement.

In line with the logic of theoretical replication, I found varying forms of cultures of CI in contrasting cultural settings. However, the cross-case comparison showed some commonality in the organisational features:

- Individual and group autonomy to take measures
- Facilitation of personal initiative
- Responsibility for one's own actions
- Acknowledgement of contributions
- Feedback on performance
- Respectful treatment
- Institutionalisation of CI: Both on group-level (regular meetings, routines, dedicated resources) and company level (compulsory values as part of the corporate philosophy, CI aligned with KPI's and performance evaluations)

These features, however, may vary in accordance to cultural theory in different contexts.

9.3 Enculturation Effects

So far the results indicate that individual-level attribution of meaning is an important determinant in cultures of CI. Practices and concepts of CI are perceived as meaningful

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but not everybody attributes the same meanings; CI provides room for multiple, subjective reinterpretations. However, it is important to note that in all work groups there were individuals that did not perceive CI as meaningful – at least in the way it was practiced in that particular group.

In the cultural perspective, group members do not only respond to the cultural milieu they are embedded in, but they actively contribute to it by their attributions of meanings. Thus a group's culture is socially constructed from within. Although individual meanings of CI may differ, they are part of a larger, consistent pattern of meanings, which provides cohesiveness and direction to the group.

Therefore, it is important to elaborate the processes through which individual meanings are shared and ultimately shape a group's culture. I have identified four specific dynamics in the process of enculturation:

- Firstly, self-selection effect is based on the insight that while CI can be thus inherently rewarding through fulfilling self-motives, it also implies substantial emotional, social and cognitive investments on the part of the individual. These investments include added responsibilities, cognitive engagement in suggestions and conformance to strict work standards and rules. Therefore individuals will choose to continue to engage in CI only if the trade-off between an increased feeling self-worth on the one hand and these investments on the other hand is favourable for themselves.
- The second effect is based on staff selection on the part of the organisation: Group leaders actively choose new group members in accordance to whether they fit into the group's culture or not.
- Thirdly, the behavioural embedding effect refers to the dynamics through which a group's culture gets embedded in behavioural routines and tangible objects. These routines and objects contribute to the maintenance of the cultural system and, in turn, transmit meanings in the enculturation of new members.

- Finally, the socialisation effect is based on the social expectations in the group. Meanings do not only provide order and sense to one's own behaviour, but also create expectations about the behaviour of other group members. These behavioural expectations are exchanged through social processes such as leadership, communication and other social interaction and ultimately guide the group's behaviour toward CI: The group members' adoption of meanings collectively creates a social environment that, in turn, fosters the adoption of these meanings by others.

9.4 Congruence of Organisational interests and individual motives

Human behaviour is both constrained and enabled by the meaning people give to their actions. If meanings underlying engagement in CI are based on a sense of self-enhancement, efficacy and consistency, it follows that organisations can shape behaviour toward CI by providing the conditions and practices through which people can fulfil these self-motives.

Consequently, the argument is that CI is effective not because it serves organisational purposes of enhancing effectiveness or efficiency, but instead because it provides meaning to its members by contributing to their feeling of self-worth. Put another way, when CI is implemented effectively, organisational interests of enhanced efficiency and effectiveness become congruent with individual interests in terms of self-motives; individuals pursue organisational interests by fulfilling their self-motives.

In this perspective, it makes little sense to view a culture of CI as an entity implemented by management. Rather, it stems from the meaning that people from a given socio-cultural context give to a set of practices, concepts and the corporate philosophy. It is, however, not enough to evaluate practices of CI through the angle of individual self-motives; CI requires an environment in which meanings become shared effectively through enculturation processes: Extensive training and exposure to CI practices gives employees the opportunity to determine whether they

experience CI as practiced in the organisation as meaningful and thus enables self-selection.

On the other hand, leaders need to select new staff according to how well they accept the group’s meanings. CI needs to be institutionalised in behavioural routines by rewarding behaviours conducive to CI and stimulating cognitive engagement. Lastly, the socialisation process requires long-term stability and enduring relationships between individuals and the organisation. The simplified overview in Figure 43 illustrates the relationship between the different aspects discussed here.

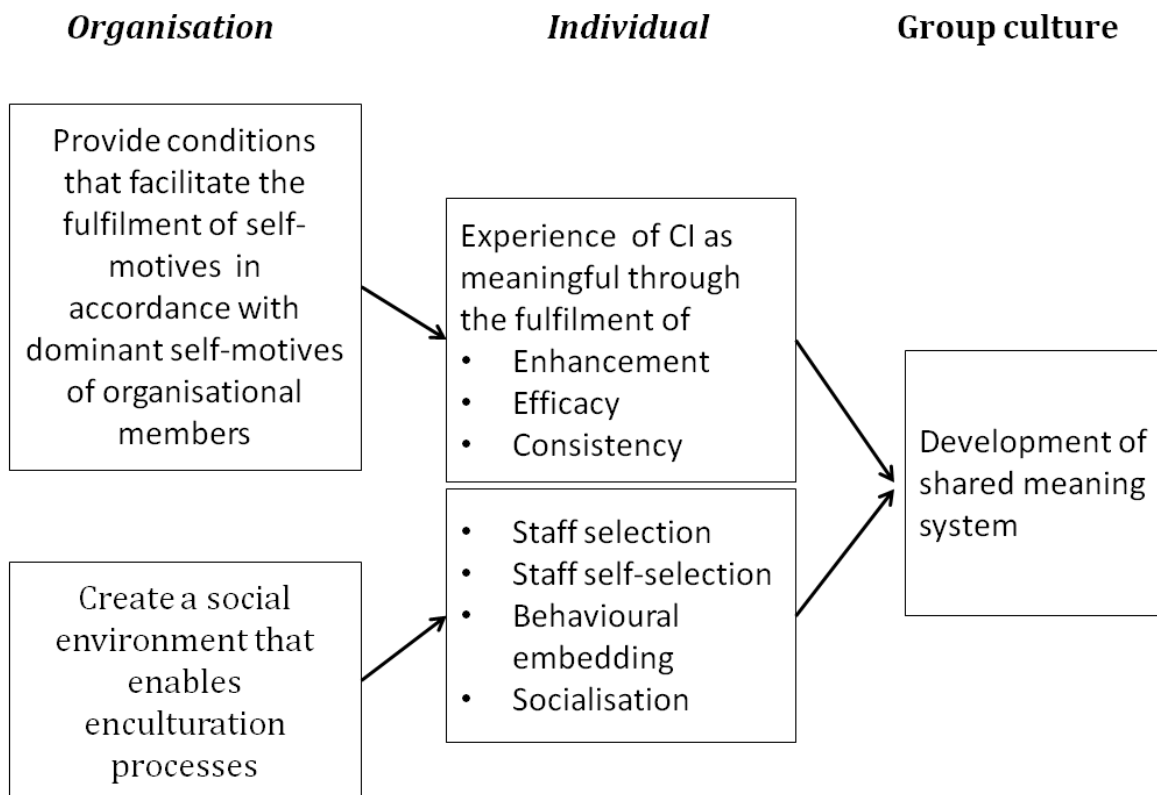


Figure 43: Shaping behaviour toward CI through self-motives and enculturation processes

Amongst the mechanisms that shape behaviours toward CI the corporate philosophy plays a significant role, as I observed across all Toyota cases. The corporate philosophy provides a framework in which organisational members can make sense of their role in the organisation. A central characteristic and strength of the TW is that it allows diverse reinterpretations, thus providing group members and leaders alike with flexibility in their interpretations. As evidence from the case studies show, the

values of the TW are purposefully used by organisational leaders to define acceptable behaviours.

A corporate philosophy – such as the exemplified by the TW in the present study – can be the centrepiece and a powerful means to create shared meanings in a group. It can serve diverse purposes:

- Staff selection based on whether new employees can relate to the values of the corporate philosophy;
- Performance evaluation based on whether employees have understood and internalised the corporate values;
- Reinforce the meanings through symbolic action;
- Providing constancy of direction by anchoring the group's KPIs in corporate values;
- Inducing action by linking desired behaviours to corporate values.

The notion of respect emerged in the observed groups as a particularly important aspect, for it defined social norms of treatment of individuals, which allowed people to maintain a positive self-image. The corporate philosophy is a strong cohesive force for the group – team members speak “a common language” when it comes to CI and Respect for People.

However, a word of warning is advisable: Although corporate values often leave leeway in their interpretation, they always imply a two-way standard and mutual obligation between the workforce and organisational leaders. If the commitment to corporate values lacks sincerity on the part of the organisation, the corporate philosophy can easily invite cynicism and its desired behavioural effects reverse to the opposite.

9.5 Universal and Specific Aspects

Generally, the cases provided support for the assertion that the internal organisational culture is shaped by the larger societal culture in which it is embedded.

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Although the shared corporate philosophy provided some degree of commonality across the cases located in diverse societal cultures, its influence could not override the impact of the surrounding societal culture.

However, the findings suggest that this does not necessarily restrict the effectiveness of CI – two workgroups with strongly contrasting group cultures but otherwise extremely similar characteristics lead to virtually identical, outstanding levels of performance. This clearly contradicts the culture-universalist position that asserts that there is one invariant “ideal” culture type for CI that leads to optimal performance and is valid across societal cultural boundaries.

On the contrary, the fact that these cases were located in contrasting societal cultures indicates the importance of a “culture-specific” position which emphasize that the “ideal” culture of CI may depend on societal culture as a contingency variable. Overall, however, the findings provide only moderate support to the “culture-specific” position, because there were considerable differences in the group cultures even within the same societal context. At the same time, however, they highlight the importance of a context-oriented view on culture.

On a related note, I found only mixed support for the idea of value congruence between societal and organisational culture: While the majority of groups cultures were well-aligned to the societal culture in terms of espoused values, leadership styles and other practices, one workgroup demonstrated that managerial practices do not necessarily have to be employed in ways that sustain existing societal values to be effective.

The fact that cultures of CI can take very different shapes and still lead to outstanding levels of performance should perhaps be a motivation to re-think the level of analysis that is usually applied: Instead of viewing group or organisational culture in its totality and searching for one specific *overall* profile, perhaps it is more useful to look for the underlying principles. As reported in Sections 8.1 through to 8.3, I found evidence for notable commonalities at the underlying level of individual meaning-making and enculturation processes across the observed group cultures.

In this logic cultures of CI might assume different overall “shapes” in correspondence to local cultural contexts in which they are embedded because the configuration of individual self-motives differs across cultural settings (Earley, 1994; Erez, 2010; Erez & Drori, 2009; Erez & Earley, 1993), but still follow the same underlying principles.

9.6 Contributions to Businesses and Academia

9.6.1 Contributions to academia: Implications for future research

If organisational cultures of CI can take different shapes in different societal contexts; viewing cultures as monolithic blocks without considering their internal dynamics and contextual embedding in the wider societal culture only provides very limited insights. Consequently, it would be prudent not to limit our efforts to the search of one specific “ideal” cultural archetype.

While I acknowledge the contributions of the existing studies that investigated the role of culture for CI, I argue that methodological diversification of research approaches bears great potential to complement existing insights. Formulating the right questions may be equally important – and difficult – as finding the answers.

Equally, I hope to contribute to an increased awareness of the meta-theoretical stances and assumptions (Burrell & Morgan, 1979) and ultimately to an informed theoretical pluralism in the field of OM/QM. It is imperative that researchers in the OM/QM field become aware of the pervasiveness of the functionalist approach and its limitations. Like other scholars before, I call for a more holistic and context-oriented understanding of culture. Also, a replication of the study across different societal cultural settings – particularly comparing Eastern and Western cultures – and/or in a different multinational organisation can increase the external validity of the findings.

The individual level emerged from this research as an important variable to understand meaning-making. I hope that this study indicates a way along which further work into culture and CI could proceed. Future studies should specifically look at how the salience of the collective and relational self-construals impact individual meaning-making with regard to CI-practices and concepts.

Behavioural aspects and social interaction that lead to shared meanings within work groups should be investigated in more detail using rich qualitative approaches. Approaches that closely study group processes and subjective perspectives appear to be a highly promising path for future research. A noteworthy approach is the one of van Dun and colleagues (2011; 2010) and has the potential to triangulate the findings from this study and provide deeper insights in the key cultural and behavioural aspects underlying CI.

9.6.2 Businesses

Some of the findings presented here are by no means new. Indeed, the importance of leadership, recognition, teamwork, staff involvement, training, and empowerment for CI has been repeatedly postulated by scholars and practitioners alike. This study differs in the explanation that it offers as to why they these characteristics are needed: In short, these features are necessary because they help employees to fulfil self-motives and thus make them experience CI as meaningful (see Section 8.2 for more details) and ultimately shape a culture of CI.

This study does not give a description of a universally valid “ideal” culture for CI, nor does it give instructions of how to implement one. I agree with Worrall and Jones (2004) in that “approaches geared to the articulation of better questions might be more useful to managers in the long run than approaches that are oriented to the production of the clear but often flawed guidance that managers and the operational users of research often seek” (p. 168).

Consequently, what this study offers is a *new way of thinking* about cultures of CI. Instead of aiming at abstract “cultural change” toward an allegedly ideal culture profile, the findings of this study suggest that an implementation of CI should commence at the opposite end: the employees’ perspective.

In other words, organisational leaders should aim at imparting CI concepts and practices in a ways that focus on their implicit value for employees in terms of the fulfilment of self-motives. Thus a large chunk of the task for organisational leaders is

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to select and implement CI approaches and tools in a manner that is cognisant of *people's needs* that will differ from one context to another. To assist, this study suggests a small framework (see Figure 43) that will help them to make informed decisions. The meaningfulness for the group members constitutes the bottom line against which CI concepts and practices need to be evaluated.

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10. Reflections

10.0 Introduction and overview

In this last chapter I will reflect on the PhD project. However, this reflection is more than a personal retrospect – as Martin (2002) puts it, *reflexivity* can enhance “the depth of insight offered by the researcher into his or her own effect on and relation to the data being collected” (p. 226).

Unlike Lee and colleagues (2011), who equate reflexivity with mere “flexibility” in the research process, I refer to reflexivity as “the process of reflecting critically on the self as researcher, the “human as instrument” and “the conscious experiencing of the self as both inquirer and respondent, as teacher and learner, as the one coming to know the self within the process of research itself” (Guba & Lincoln, 2005, p. 210).

Reflexivity is based on the acknowledgement that even the most rigorous research incorporates values-based assumptions and judgements, especially in culture research. The aim of reflexivity is to be explicit about one’s position as researcher in the research process rather than hiding it.

The research process is seen as a dialogue – with participants and with oneself as researcher. A thoughtful assessment of the role of the researcher and the research process can increase the validity of the findings and the relevance of its outputs. In the following sections, I will reflect on my role in the research process in terms of my personal attributes, cultural provenance, paradigmatic position and methods employed.

10.1 Personal Reflection

Following the example of Hofstede, Sousa-Poza (1999) stated his own value orientations to account for the cultural bias of the researcher¹. My personal values tend more toward the individualist end of the scale, and I also admit a dislike for

¹ Interestingly, thus Hofstede – surpassingly considered one of the most prominent figures in functionalist cultural research – acknowledges researcher bias and recommends reflexivity.

pronounced hierarchies or power differentials. Not least due to my own values, I felt very comfortable living in NZ society. On the other hand, however, my entire “family-in-law” lives in Spain so that I am quite aware of what high In-Group Collectivism means in real life².

My educational background in industrial engineering and practical experience in manufacturing and logistics were certainly an advantage. They did not only enhance my credibility and my ability to “connect” with the participants, as many of them had a strong technical background as well. It also helped my own “intuitive” understanding during the interviews and on-the-job discussions. In this sense Lewis (1998), identified the researcher’s institution as a highly important factor in the development of OM theory.

However, I found it initially difficult to avoid kaizen jargon when talking to employees, most of whom lack a formal education in management. Furthermore, since neither Spanish nor English is my native tongue, at times I had difficulties – through the limited choice of my words – to get beneath textbook concepts and locate what really drives people to engage in CI in the organisations.

Also, I must say that eventually the in-depth immersion in the research setting and the intensive talks I had with participants over many weeks made me realise that listening is almost always more effective than talking.

10.2 Cultural Reflection

Schein (1984) explained that "the problem of deciphering a particular organization's culture... is more a matter of surfacing assumptions.... We will not find alien form of perceiving, thinking, and feeling if the investigator is from the same parent culture as the organization that is being investigated" (pp. 12-13).

I entered all work groups as a cultural outsider – both in terms of the organisation and nationality: I had never worked with Toyota before and am a foreigner in both Spain

² Appropriately enough, O’Connell, et al. (2008) used the term “tribal culture.”

and NZ. While this was initially an impediment to gain access to the sites, it turned into an advantage when conducting the fieldwork: Without exception people were extraordinarily friendly, enthusiastic and keen to share their views and knowledge with me.

Also I look much younger than I actually am; a fact that, I believe, has been helpful during fieldwork. I got the impression that a lot of conversational partners perceived me as less of a “threat” and were consequently more willing to share information openly with me. I think I was perceived more as a student than a professional consultant or the like. With many employees I was able to connect and still maintain a friendly relationship. Interestingly enough, in one of the Spanish work groups one group member came to work on her day off – as she explicitly pointed out: not because of the company, but to help me with my research³.

On a theoretical level, the framework I presented here is not “culture-free”: The individual presents the central link between macro socio-cultural environment and meso group culture in Erez and Earley’s (1993) cultural self-representation theory. Viewed in the light of Nisbett’s (2003) propositions, one could argue that this shows inability to escape my own cultural (individualist) provenance in theorising. On the other hand, however, I argue that this focus on the individual might be perhaps quite adequate because the societies in which the case studies were located are, although very different from each other, both Western cultures after all.

Finally, I’d like to add that, although I reject the universalist assumptions that functionalist research has in common, the discussion of the findings still revolves around the implicit assumption that the cultures that I investigated share the same

³ This can also be understood as an example of the extraordinary strength and commitment of direct, personal relationships in Spain. On another occasion a participant from a Spanish case did not even bother to reply to my emails – until I met her in person and established a personal relationship. From then on she was very helpful.

structural and dynamic properties in terms of self-motives and enculturation effects. Likewise, people are assumed to make reasoned choices about their behaviour.

10.3 Reflections on Paradigmatic Position

Working within a certain scientific paradigm or another is perhaps quite comparable to different cultural world views (Nisbett, 2003) – it is often a question of scientific enculturation and personal preferences. This section works to reflect on the “scientist’s frame of reference in the generation of social theory and research” (Burrell & Morgan, 1979, p. x).

The present research included also a conscious reflection about which questions can be asked and answered by a certain mode of inquiry and its underlying assumptions. This, in turn, required clarification as to which the most relevant questions *are*. Therefore the clear conceptualisation of the culture construct was paramount to formulate these questions – “the way we do things around here” was simply not enough. Once these questions were formulated, I determined which paradigm and methods would provide the means to answer them.

The concept of duality – culture understood as both cognitive and social – did not place this work squarely into any one of the existing paradigmatic camps. For instance, with the TST on the one hand and inductive, quasi-ethnographic approaches on the other I combined methods from two paradigms that are traditionally framed as opposites in the social sciences. The study, however, benefits clearly from both. As Alvesson, Hardy and Harley (2008) put it, I tried to use the “tensions among different perspectives to expose different assumptions and open up new ways of thinking” (p. 483).

For instance, I merged a rigorous deductive method such as TST with the highly flexible inductive method of thematic analysis of open-ended interviews to discern patterns between internalised values and individual meaning-making. By maintaining the integrity of individual representations I have attempted to “understand the

fundamental nature of the social world at the level of subjective experience" (Burrell & Morgan, 1979, p. 28).

Combinations of highly systematic (but rigid) methods with inductive, less rigid methods (such as the open-ended interviews or workshop) allowed me to probe the specifics of the group cultures and yet systematically conduct comparisons. For instance, the answers of the surveys would have been extremely difficult to interpret without the subsequent in-depth fieldwork, if not outright meaningless. The methodological diversity and extensive cross-linking of methods reflects my attempt to understand the richness of meaning construction in a particular cultural context; the different data sources thus contributed to a holistic perspective of organisational cultures of CI from which I attempted to extract the underlying principles.

Combining contrasting paradigms is, however, a risky endeavour. Burrell and Morgan (1979) wrote:

Rival perspectives within the same paradigm or outside its bounds appear as satellites defining alternative points of view. Their impact on upon orthodoxy, however, is rarely very significant. They are seldom strong enough to establish themselves as anything more than a somewhat deviant set of approaches. As a result the possibilities which they offer are rarely explored, let alone understood. (p. xi)

The editors' comments on "building theory by combining lenses" of a recent issue of the Academy of Management Review read, however, more optimistically:

We have a formidable opportunity in front of us to contribute to our field by taking down walls and building bridges between perspectives. Many great theoretical developments and many new explanations for unexplained phenomena could follow, and we urge management scholars to take up this challenge. Combining multiple theoretical lenses to develop new explanations of management phenomena and solve managerial challenges will continue to be a critical aspect of how research is conducted in our field. (Okhuysen & Bonardi, 2011, pp. 10-11)

In the end it remains to be seen how this study will be received.

10.4 Reflections on Methods

I agree with Sanchez-Runde (Sanchez-Runde, et al., 2009) and colleagues in that the study of culture can be “difficult, expensive, complex, imprecise, sensitive, time-consuming and risky” (2009, p. 305). Although the research was guided by the overall research aim, the research questions were constantly refined throughout the project.

What may appear a linear and structured progression in this thesis was in reality a highly recursive and at times circular process. The following sections describe insights that refer to my own development as a fieldworker.

10.4.1 Interviews

The looseness of the interviews often revealed unexpected features of the group’s culture. However, it also required a high degree of empathy on my part. It was essential to be flexible and ask the right type of questions (Guba & Lincoln, 2005): The frame of reference that I use as an interviewer needed to be relevant for the interviewee – and was often quite different for managers in comparison with shop floor workers.

My experience was that interviewees with a higher educational background or higher hierarchical positions were more likely to recite textbook concepts or reproduce managerial rhetoric about Lean Production or the TW – they told you what they thought was expected from them. Likewise, they were often visibly uncomfortable and hesitant when participating in the TST.

On the other hand, people with a lower educational background tended to be more straightforward, direct – or simply put, more honest – in their answers. If you ask operators about the TW, you do not get a sophisticated and well-formulated answer, because this is often not something they had consciously thought about. Instead they often share openly with you what comes to their minds, particularly if you ask them to reflect on specific events in the past. These answers contain sometimes also irrelevant information in terms of the purpose of this research (“noise in the signal”), but more often than not offer invaluable, authentic insights.

10.4.2 Interaction with research participants

Sometimes what was left unsaid was as important as what is being said. For instance, the importance of consistency and stability in the approach to CI would have probably gone unnoticed, had the study only included Toyota cases in the multiple-case study design. This is because these conditions were so strongly taken for granted and internalised that their *presence* in the Toyota-cases became visible only due to their *absence* in the contrasting non-Toyota case.

In other instances, when sensitive issues were touched upon during the interviews, they were often only openly discussed *after* the actual interview in more relaxed social situations, such as a coffee or lunch break, and when the audio-recorder was switched off. It requires some sensitivity to sense such situations and act accordingly.

On a related note, the discrepancy between managerial depictions and my own observations or chats with other workforce was at times striking. This should be kept in mind when using “remote” methods such as surveys that rely on responses from only one person in an organisation, usually a manager.

Stake (2005) adequately explained that “qualitative case study is characterized by researchers spending extended time on site, personally in contact with activities and operations of the case, reflecting, and revising descriptions and meanings of what is going on” (p. 450). By helping organisational members help solve problems, for instance, in using spreadsheet or presentation software I was often able to establish an atmosphere of trust with group members and “give something back” to the participants and the organisations in exchange for their cooperation.

In turn, I believe that leaders – particularly in the Toyota work groups – used the participation in this study as a “recognition instrument”: Group members were provided with the opportunity to talk about their own achievements and present their views – clearly a measure can contribute to a sense of self-enhancement. Looked at it that way, the data gathering methods interacted with the object of study.

10.5 Concluding Remarks

This thesis tells a story about CI, and alternative stories could be told. The present study uses the theoretical perspective of culture to study the social embeddedness of CI in organisations. There are, of course, alternative theoretical lenses⁴.

When I began this project, I set out to seek *the* Culture for CI (with a capital “C”, like the absolute *Truth*). Now, toward the end of the project I believe it is more important to find the culture that is meaningful in the individual’s life – with a miniscule “c”. Thus the contribution this study aims to make is not a “grand” theory with broad generalisability, such as “*the* ideal cultural profile for CI” would constitute. Rather, this thesis attempts to make a contribution to “what works” in real *local* contexts.

⁴ Alternative theoretical lenses similar to organisational culture include but are not limited to organisational climate, communities of practice, institutional theory, as introduced briefly in the review of the literature (see Chapters 2 and 3).

Glossary

Allocentric: See *self-concept*

Continuous Improvement: Umbrella term for incremental organisational innovation, often carried out by frontline workers; aptly characterised as “doing what we do better” (Bessant, et al., 2001, p. 68); core principle of management approaches such as TQM, Lean, Six Sigma or ISO9001.

Collective self: See *self-concept*

Corporate philosophy: Set of managerial prescribed values of an organisation, not necessarily identical with the actual *organisational culture*.

Duality of culture: Central concept in this thesis for the understanding of the culture construct. Culture is understood as the result of both individual cognition and social processes (see pp. 82 for more information).

Emic: Culture-specific, the opposite of *etic*. The terms ‘emic’ and ‘etic’ were first used in anthropology to describe the difference between a native’s (or insider’s) and the outside researcher’s view of culture. While insiders use the group’s specific categories and meanings, outsiders impose their own categories onto the culture. According to Morey and Luthans (1984), the terms were introduced by Kenneth Pike and coined after the suffixes of the terms ‘phonemics’ and ‘phonetics’, which possess a parallel meaning in linguistic analysis to the above dichotomy in cultural analysis.

Enculturation: “The process by which an individual learns the traditional content of a culture and assimilates its practices and values” Merriam-Webster (2011).

Etic: Culture-universal, opposite of *emic*.

Group member: See *organisational member*.

Idiocentric: See *self-concept*.

Ingroup favouritism: “preferential treatment of members of one’s own group and the discrimination against out-group members” (Yamagishi, et al., 1998, p. 315).

Meaning: “refers to how an object or an utterance is interpreted. Meaning has a subjective referent in the sense that it appeals to an expectation, a way of relating to things. Meaning makes an object relevant” (Alvesson, 2004, p. 318). Meanings “refer to constructed entities that cannot be located solely in the head of the meaning maker or solely in the practices or products of world; they are always distributed across both” (Markus & Hamedani, 2007, p. 9). See also *social constructionism*.

National culture: This term is used in this thesis by way of exception when referring to other scholars’ works that use the term ‘*national*’ rather than ‘*societal*’ culture. While ‘*national*’ implicitly assumes a congruence of cultures and nation states, the term ‘*societal*’ makes a finer, but not necessarily perfect distinction.

Organisational culture: Umbrella term used for the actual culture of an organisation or a part thereof (“group”). Synonymous with corporate culture, organisation culture, firm culture and company culture. The term corporate culture tends to be used more in practitioner-oriented outlets, while organisational is used more frequently in more academic publications. Not identical with *corporate philosophy*. Defined in this thesis as “shared *meaning system*”.

Organisational member: The term refers to a person’s role as member of an organisation, rather than employment status. Organisational members can be workforce, management or owners; the same applies to *group members*.

Organisational studies: Overarching name for scientific disciplines that are concerned with the systematic study of organisations, such as organisational behaviour, industrial and organisational psychology, human resources and management.

Personal self: See *self-concept*.

Reflexivity: “the process of reflecting critically on the self as researcher, (Guba & Lincoln, 2005, p. 210).

Relational self: See *self-concept*.

Self-concept: An individual’s perception of “self”. Used in this study as the “social self”, i.e. how individuals define themselves in relation to others. This study distinguishes between three different self-construals: the personal, relational and collective self (Brewer & Chen, 2007). Related terms are idiocentric and allocentric, see Table 9.

Self-construal: see *self-concept*.

Self-consistency: “Desire to experience to sense coherence and continuity” (Erez, 2009, p. 621).

Self-efficacy: “Conviction that one is competent and efficacious in relation to specific tasks” (Erez, 2009, p. 621), feeling of “growth”, desire to perceive oneself as competent and efficacious.

Self-enhancement: “The experience of a positive cognitive and affective state of self-worth and well-being” (Erez, 2009, p. 621), Maintaining a positive self-image

Self-motive: “Psychological needs” of individuals. Erez and Earley (1993) distinguish between *self-enhancement*, *self-efficacy* and *self-consistency*.

Social constructionism/constructivism: The notion of social construction implies that an object, practice or concept does not inherently possess a meaning “out there” in the world. Instead, it is people or social institutions of a given group or culture that give meaning to the object, practice or concept – the meaning is socially constructed.

Societal culture: Key term used throughout this thesis to describe societal-level culture. The terms ‘societal’, ‘ethnic’ and ‘national’ and ‘country’ culture are treated synonymously for societal-level culture in this thesis although I acknowledge that they use a different frames of reference for group-inclusion; “national” uses the

nation-state as criterion for inclusion, while “societal” permits a more fine-grained differentiation such as in language groups (as applied in House, et al., 2004) or ethnicities within a nation-state. In this thesis I use the term “societal culture” while generally maintaining the original terms when referring to other scholars’ works.

Value: “Values are internalized cognitive structures that guide choices by evoking a sense of basic principles of right and wrong (e.g., moral values), as well as priorities (e.g., personal achievement vs. group good)” (Oyserman, Coon, et al., 2002, p. 114). In this thesis the term “value” is used to signify (a) Internalised values of individuals that were shaped by the *societal culture* through childhood socialisation (see *self-concept*) or (b) Espoused values of the group: Relatively superficial values held by the group that are part of, but not essential for a group’s culture; or lastly (c) Corporate values that form part of a *corporate philosophy*.

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Studying Cultures of Continuous Improvement as Shared Meaning Systems

**A Comparative Investigation of Group Cultures of Continuous
Improvement in Different Societal Contexts**

Volume II (Appendices)

A thesis presented in partial fulfilment of the requirements for the degree of

Doctor of Philosophy

At Massey University, Manawatu Campus, New Zealand

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May 2011

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11. Appendix A: Dimensions of Culture

In this section I discuss the ontological status of “dimensions of culture” and how they should be understood as contributing to the research design (cp. Chapter 5.2.2).

With reference to his own and others’ dimensional approaches to culture, Hofstede (2006) explained that “dimensions should not be reified. They do not “exist” in a tangible sense. They are constructs.... If they exist, it is in our minds – we have defined them into existence. They should help us in understanding and handling the complex reality of our social world” (pp. 894-895).

In an article with Peterson he explains further that “the dimension approach does not replace in-depth studies of country cultures; on the contrary, it invites them” (Hofstede & Peterson, 2000, p. 404). They subsequently emphasise that "cultural dimensions were never intended to provide a complete basis for analyzing a culture" and conclude forcefully that "research needs to avoid ending with culture dimensions as the basis for forming hypotheses and should instead use them as a helpful, but incomplete, beginning¹" (Hofstede & Peterson, 2000, p. 415).

In conclusion, this study views dimensions of culture as a “helpful, but incomplete, beginning” (Hofstede & Peterson, 2000, p. 415) and to signify mere espoused values of the group.

¹ Thus paradoxically, Hofstede, supposedly the figurehead of functionalist cross-cultural research and often harshly criticised for the same (for instance, by Baskerville, 2003) - read carefully - turns out to be a strong critic of the reductionist perspective that his own framework has fuelled for many decades. Contrary to Hofstede’s own stated intentions, his framework lead to the dominance of a parochial perspective on culture that has been used for much of the existing functionalist research (Lowe, 2001). At the same time it is important to note, however, that Hofstede’s work has also greatly contributed to making research into the role of culture presentable in many scientific disciplines.

12. Appendix B: Explication of GLOBE Dimensions

This section explains the content of the GLOBE dimensions of culture (mainly needed for Sections 5.2.2, 5.3.1, 6.2 and 7.3.1).

1. *Uncertainty Avoidance* is defined as the extent to which members of an organization or society strive to avoid uncertainty by reliance on social norms, rituals, and bureaucratic practices to alleviate the unpredictability of future events.
2. *Power Distance* is defined as the degree to which members of an organization or society expect and agree that power should be unequally shared.
3. *Collectivism I: Institutional Collectivism* reflects the degree to which organizational and societal institutional practices encourage and reward collective distribution of resources and collective action.
4. *Collectivism II: In-Group Collectivism* reflects the degree to which individuals express pride, loyalty and cohesiveness in their organizations or families.
5. *Gender Egalitarianism* is the extent to which an organization or a society minimizes gender role differences and gender discrimination.
6. *Assertiveness* is the degree to which individuals in organizations or societies are assertive, confrontational, and aggressive in social relationships.
7. *Future Orientation* is the degree to which individuals in organizations or societies engage in future-oriented behaviours such as planning, investing in the future, and delaying gratification.
8. *Performance Orientation* refers to the extent to which an organization or society encourages and rewards group members for performance improvement and excellence.
9. Finally, *Humane Orientation* is the degree to which individuals in organizations or societies encourage and reward individuals for being fair, altruistic, friendly, generous, caring, and kind to others.

(Adopted from House, Javidan, Hanges, & Dorfman, 2002, pp. 5-6)

13. Appendix C: Questionnaires

This section shows the opening questionnaire used at the outset of each case study to gain a tentative understanding of the group's culture and its CI practices (cp. Section 5.2.2). The first section displays an example of the English version while the Spanish version is shown in the second section.

13.1 English Version

Continuous Improvement and Culture at Toyota

Culture and Continuous Improvement

1. Introduction

In this study, I would like to understand the norms and values at the Toyota Plant in Thames and how they relate to continuous improvement of practices and processes.

There are no right or wrong answers, please give the answers that you think best describe the situation in your own area.

It is important to note that your answered questionnaire will **only be read by the researcher**. No individual responses, which could give clues about the respondent, will be fed back to Toyota.

Please respond to the questions by ticking the box above the number that most closely represents your observations.

2. Questions about Toyota

(Please see next pages)

Continuous Improvement and Culture at Toyota

| | |
|--|---|
| <p>1 In my department, team members are expected to:</p> <p>obey their boss without question question their boss when in disagreement</p> <p><input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7</p> | <p>2 In my department, people are generally:</p> <p>assertive non-assertive</p> <p><input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7</p> |
| <p>3 In my department, people are generally:</p> <p>aggressive non-aggressive</p> <p><input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7</p> | <p>4 In my department, meetings are usually:</p> <p>planned well in advance (2 or more weeks in advance) spontaneous (planned less than an hour in advance)</p> <p><input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7</p> |
| <p>5 The way to be successful in my department is to:</p> <p>plan ahead take events as they occur</p> <p><input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7</p> | <p>6 In my department, people are generally:</p> <p>very concerned about others not at all concerned about others</p> <p><input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7</p> |
| <p>7 In my department the accepted norm is to:</p> <p>plan for the future accept the status quo</p> <p><input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7</p> | <p>8 In my department, people are generally:</p> <p>dominant non-dominant</p> <p><input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7</p> |
| <p>9 In my department, a person's influence is based primarily on:</p> <p>one's ability and contribution to Toyota the authority of one's position</p> <p><input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7</p> | <p>10 The pay and bonus system in my department is designed to maximise:</p> <p>individual interest collective interest</p> <p><input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7</p> |

Continuous Improvement and Culture at Toyota

| | |
|--|---|
| <p>11 In my department, people are generally:</p> <p>tough tender</p> <p><input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7</p> | <p>12 In my department, people are generally:</p> <p>very friendly very unfriendly</p> <p><input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7</p> |
| <p>13 In my department, major rewards are based on:</p> <p>only performance effectiveness performance effectiveness and other factors (e.g. seniority and political connexions) only factors other than performance effectiveness (e.g. seniority and political connexions)</p> <p><input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7</p> | <p>14 In my department, people in positions of power try to:</p> <p>increase their social distance from less powerful individuals decrease their social distance from less powerful individuals</p> <p><input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7</p> |
| <p>15 In my department, being innovative to improve performance is generally:</p> <p>substantially rewarded somewhat rewarded not rewarded</p> <p><input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7</p> | <p>16 People in my department:</p> <p>take no pride in working for Toyota take a moderate amount of pride in working for Toyota take a great deal of pride in working for Toyota</p> <p><input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7</p> |
| <p>17 In my department, people are generally:</p> <p>very sensitive towards others not at all sensitive towards others</p> <p><input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7</p> | <p>18 In my department, people are generally:</p> <p>very generous not at all generous</p> <p><input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7</p> |
| <p>19 In my department:</p> <p>group cohesion is more valued than individualism group cohesion and individualism are equally valued individualism is more valued than group cohesion</p> <p><input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7</p> | <p>20 In my department, the plant management is personally involved in quality improvement projects</p> <p>strongly agree strongly disagree</p> <p><input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7</p> |

Continuous Improvement and Culture at Toyota

21 In my department, orderliness and consistency are stressed, even at the expense of experimentation and innovation

strongly agree neither agree nor disagree strongly disagree

1 2 3 4 5 6 7

22 Toyota shows loyalty towards employees.

strongly agree neither agree nor disagree strongly disagree

1 2 3 4 5 6 7

23 In my department, managers encourage group loyalty even if individual goals suffer.

strongly agree neither agree nor disagree strongly disagree

1 2 3 4 5 6 7

24 In my department, job requirements and instructions are spelled out in detail so employees know what they are expected to do.

strongly agree neither agree nor disagree strongly disagree

1 2 3 4 5 6 7

25 In my department, group members take pride in the individual accomplishments of their group manager.

strongly agree neither agree nor disagree strongly disagree

1 2 3 4 5 6 7

26 In my department, group managers take pride in the individual accomplishments of group members.

strongly agree neither agree nor disagree strongly disagree

1 2 3 4 5 6 7

27 In my department, employees are encouraged to strive for continuously improved performance.

strongly agree neither agree nor disagree strongly disagree

1 2 3 4 5 6 7

28 In my department, employees feel loyalty to Toyota.

strongly agree neither agree nor disagree strongly disagree

1 2 3 4 5 6 7

29 In my department, most work is highly structured, leading to few unexpected events.

strongly agree neither agree nor disagree strongly disagree

1 2 3 4 5 6 7

30 In my department, most employees set challenging work goals for themselves.

strongly agree neither agree nor disagree strongly disagree

1 2 3 4 5 6 7

Continuous Improvement and Culture at Toyota

31 Every person in my department knows our quality philosophy, can explain it, and uses it to guide work performance.

| | | | | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| strongly agree | | | | neither agree nor disagree | | | | strongly disagree |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | | |

32 In my department, rewards and recognition are given to employees for improvement, not just for achieving a target or goal.

| | | | | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| strongly agree | | | | neither agree nor disagree | | | | strongly disagree |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | | |

33 In my department, everybody within the plant accepts his/her responsibility for quality.

| | | | | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| strongly agree | | | | neither agree nor disagree | | | | strongly disagree |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | | |

34 In my department, our plant management is around on the shop floor at least twice a day, looking after the status of operations.

| | | | | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| strongly agree | | | | neither agree nor disagree | | | | strongly disagree |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | | |

35 In my department, plant management provides personal leadership for quality products and quality improvement.

| | | | | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| strongly agree | | | | neither agree nor disagree | | | | strongly disagree |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | | |

36 When the pressure is on in my department, staying within budget gets higher priority than quality.

| | | | | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| strongly agree | | | | neither agree nor disagree | | | | strongly disagree |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | | |

37 All employees in my department have been given the charge to improve quality processes in their own areas of responsibility.

| | | | | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| strongly agree | | | | neither agree nor disagree | | | | strongly disagree |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | | |

38 In my department, we believe that quality should be the responsibility of everyone in the organization.

| | | | | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| strongly agree | | | | neither agree nor disagree | | | | strongly disagree |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | | |

39 In my department, our plant management creates and communicates a vision focused on quality improvement.

| | | | | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| strongly agree | | | | neither agree nor disagree | | | | strongly disagree |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | | |

40 In my department, bringing a variety of perspectives to solving problems leads to better solutions.

| | | | | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| strongly agree | | | | neither agree nor disagree | | | | strongly disagree |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | | |

Continuous Improvement and Culture at Toyota

41 Everyone in my department has been made accountable for quality.

strongly agree neither agree nor disagree strongly disagree

1 **2** **3** **4** **5** **6** **7**

42 In my department, training and developing all employees in continuous improvement receives high priority.

strongly agree neither agree nor disagree strongly disagree

1 **2** **3** **4** **5** **6** **7**

3. Questions about your personal background

1. How old are you? _____ years
2. What is your gender? Male
 Female
3. How many years of formal education do you have (including primary school)? _____ years
4. How long have you worked for Toyota? _____ years and _____ months.
5. What is your position within Toyota? _____

Thank you very much for your help!

13.2 Spanish Version

Mejora Continua y Cultura Corporativa en TLSES

Cultura y Mejora Continua

1. Introducción

En este proyecto me interesan tus creencias sobre normas, valores, y practicas y cómo éstas están relacionadas con la mejora continua en el TLSES centro logístico.

No hay respuestas correctas ni incorrectas, y éstas no indican lo buena o mala que es el TLSES centro logístico.

Es importante que conozcas que tu cuestionario cumplimentado sólo será leído por mi, Jürgen. Ninguna información individual, con la que se pudiera denotar tu identidad se dará a alguna persona de Toyota.

Por favor, responde a las preguntas marcando con una cruz el número que mejor represente tus observaciones acerca del TLSES centro logístico.

2. Preguntas sobre TLSES

(Ver páginas siguientes)

Mejora Continua y Cultura Corporativa en TLSES

| | |
|--|---|
| <p>11 Donde yo trabajo, el personal es por lo general:</p> <p>duro blando</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p> <p>1 2 3 4 5 6 7</p> | <p>12 Donde yo trabajo, el personal es por lo general:</p> <p>muy amistoso muy poco amistoso</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p> <p>1 2 3 4 5 6 7</p> |
| <p>13 Donde yo trabajo, las compensaciones más importantes se basan:</p> <p>en la efectividad en factores no relacionados con la efectividad</p> <p>solo en la efectividad en el desempeño como antigüedad, contactos, etc)</p> <p>más otros factores como antigüedad, contactos, etc</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p> <p>1 2 3 4 5 6 7</p> | <p>14 Donde yo trabajo, el personal que desempeña cargos de poder trata de:</p> <p>aumentar su distancia social con personas de menos poder disminuir su distancia social con las personas de menos poder</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p> <p>1 2 3 4 5 6 7</p> |
| <p>15 Donde yo trabajo, ser innovador para mejorar el rendimiento es por lo general:</p> <p>ampliamente recompensado no es recompensado</p> <p>recompensado en cierto grado</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p> <p>1 2 3 4 5 6 7</p> | <p>16 Donde yo trabajo, el personal:</p> <p>no está orgulloso de trabajar para TLSES está muy orgulloso de trabajar para TLSES</p> <p>está moderadamente orgulloso de trabajar para TLSES</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p> <p>1 2 3 4 5 6 7</p> |
| <p>17 Donde yo trabajo, el personal es por lo general:</p> <p>muy receptivo a los demás nada receptivo a los demás</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p> <p>1 2 3 4 5 6 7</p> | <p>18 Donde yo trabajo, el personal es por lo general:</p> <p>muy generoso nada generoso</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p> <p>1 2 3 4 5 6 7</p> |
| <p>19 Donde yo trabajo:</p> <p>se valora más la cohesión del grupo que el individualismo se valora más el individualismo que la cohesión de grupo</p> <p>se valoran por igual la cohesión de grupo que el individualismo</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p> <p>1 2 3 4 5 6 7</p> | <p>20 Donde yo trabajo, el jefe de la planta está personalmente involucrado en los proyectos de mejora de calidad.</p> <p>totalmente de acuerdo en total desacuerdo</p> <p>ni de acuerdo ni en desacuerdo</p> <p><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p> <p>1 2 3 4 5 6 7</p> |

Mejora Continua y Cultura Corporativa en TLSES

21 Donde yo trabajo, se pone énfasis en el método y la coherencia, incluso a expensas de la experimentación y la innovación.

| | | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------------|--------------------------|--------------------------|--------------------------|
| totalmente de acuerdo | | | ni de acuerdo ni en desacuerdo | | | en total desacuerdo |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

22 TLSES es leal con su personal.

| | | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------------|--------------------------|--------------------------|--------------------------|
| totalmente de acuerdo | | | ni de acuerdo ni en desacuerdo | | | en total desacuerdo |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

23 En TLSES, los directivos alientan la lealtad de grupo incluso en detrimento de los objetivos individuales.

| | | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------------|--------------------------|--------------------------|--------------------------|
| totalmente de acuerdo | | | ni de acuerdo ni en desacuerdo | | | en total desacuerdo |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

24 Donde yo trabajo, se explican con todo detalle las necesidades e instrucciones, de tal manera que los empleados sepan lo que se espera que hagan.

| | | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------------|--------------------------|--------------------------|--------------------------|
| totalmente de acuerdo | | | ni de acuerdo ni en desacuerdo | | | en total desacuerdo |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

25 Donde yo trabajo, los miembros de grupo están orgullosos de los logros personales de su jefe de grupo.

| | | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------------|--------------------------|--------------------------|--------------------------|
| totalmente de acuerdo | | | ni de acuerdo ni en desacuerdo | | | en total desacuerdo |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

26 Donde yo trabajo, los jefes de grupo están orgullosos de los logros personales de los miembros del grupo.

| | | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------------|--------------------------|--------------------------|--------------------------|
| totalmente de acuerdo | | | ni de acuerdo ni en desacuerdo | | | en total desacuerdo |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

27 Donde yo trabajo, se alienta al personal a esforzarse por mejorar continuamente el rendimiento.

| | | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------------|--------------------------|--------------------------|--------------------------|
| totalmente de acuerdo | | | ni de acuerdo ni en desacuerdo | | | en total desacuerdo |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

28 Donde yo trabajo, el personal es leal a TLSES.

| | | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------------|--------------------------|--------------------------|--------------------------|
| totalmente de acuerdo | | | ni de acuerdo ni en desacuerdo | | | en total desacuerdo |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

29 Donde yo trabajo, la mayoría del trabajo está en buena medida estructurado, dejando pocos acontecimientos al azar.

| | | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------------|--------------------------|--------------------------|--------------------------|
| totalmente de acuerdo | | | ni de acuerdo ni en desacuerdo | | | en total desacuerdo |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

30 Donde yo trabajo, la mayoría del personal se fija objetivos de trabajo ambiciosos.

| | | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------------|--------------------------|--------------------------|--------------------------|
| totalmente de acuerdo | | | ni de acuerdo ni en desacuerdo | | | en total desacuerdo |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Mejora Continua y Cultura Corporativa en TLSES

31 Todos en nuestro departamento conocen nuestra filosofía de calidad, la puede explicar y la usa para gestionar la efectividad.

| | | | | |
|--------------------------|--------------------------|-----------------------------------|--------------------------|--------------------------|
| totalmente de acuerdo | | ni de acuerdo ni en desacuerdo | | en total desacuerdo |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1 | 2 | 3 | 4 | 5 |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6 | 7 | | | |

32 Donde yo trabajo, las recompensas y los reconocimientos se dan al personal por mejoras y no solo para alcanzar un objetivo.

| | | | | |
|--------------------------|--------------------------|-----------------------------------|--------------------------|--------------------------|
| totalmente de acuerdo | | ni de acuerdo ni en desacuerdo | | en total desacuerdo |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1 | 2 | 3 | 4 | 5 |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6 | 7 | | | |

33 Donde yo trabajo, todo el mundo acepta su responsabilidad con respecto a la calidad.

| | | | | |
|--------------------------|--------------------------|-----------------------------------|--------------------------|--------------------------|
| totalmente de acuerdo | | ni de acuerdo ni en desacuerdo | | en total desacuerdo |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1 | 2 | 3 | 4 | 5 |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6 | 7 | | | |

34 Donde yo trabajo, los jefes están en el almacén por lo menos dos veces al día para cuidar de las operaciones.

| | | | | |
|--------------------------|--------------------------|-----------------------------------|--------------------------|--------------------------|
| totalmente de acuerdo | | ni de acuerdo ni en desacuerdo | | en total desacuerdo |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1 | 2 | 3 | 4 | 5 |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6 | 7 | | | |

35 Donde yo trabajo, los jefes asumen el liderazgo en cuestiones de productos de calidad y mejora continua.

| | | | | |
|--------------------------|--------------------------|-----------------------------------|--------------------------|--------------------------|
| totalmente de acuerdo | | ni de acuerdo ni en desacuerdo | | en total desacuerdo |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1 | 2 | 3 | 4 | 5 |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6 | 7 | | | |

36 Cuando hay mucha presión en mi departamento, respetar el presupuesto recibe más prioridad que las cuestiones de calidad.

| | | | | |
|--------------------------|--------------------------|-----------------------------------|--------------------------|--------------------------|
| totalmente de acuerdo | | ni de acuerdo ni en desacuerdo | | en total desacuerdo |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1 | 2 | 3 | 4 | 5 |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6 | 7 | | | |

37 A todo el personal en mi departamento se le ha dado el cargo de mejorar los procesos de calidad en su propia área de responsabilidad.

| | | | | |
|--------------------------|--------------------------|-----------------------------------|--------------------------|--------------------------|
| totalmente de acuerdo | | ni de acuerdo ni en desacuerdo | | en total desacuerdo |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1 | 2 | 3 | 4 | 5 |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6 | 7 | | | |

38 Donde yo trabajo, creemos que la calidad debería ser la responsabilidad de todo el mundo en la empresa.

| | | | | |
|--------------------------|--------------------------|-----------------------------------|--------------------------|--------------------------|
| totalmente de acuerdo | | ni de acuerdo ni en desacuerdo | | en total desacuerdo |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1 | 2 | 3 | 4 | 5 |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6 | 7 | | | |

39 Donde yo trabajo, nuestros jefes crean y comunican una vision enfocada en la mejora continua.

| | | | | |
|--------------------------|--------------------------|-----------------------------------|--------------------------|--------------------------|
| totalmente de acuerdo | | ni de acuerdo ni en desacuerdo | | en total desacuerdo |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1 | 2 | 3 | 4 | 5 |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6 | 7 | | | |

40 Donde yo trabajo, aportar una variedad de perspectivas para resolver problemas resulta en mejores soluciones.

| | | | | |
|--------------------------|--------------------------|-----------------------------------|--------------------------|--------------------------|
| totalmente de acuerdo | | ni de acuerdo ni en desacuerdo | | en total desacuerdo |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1 | 2 | 3 | 4 | 5 |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6 | 7 | | | |

Mejora Continua y Cultura Corporativa en TLSES

41 Todo el mundo en mi departamento ha sido hecho responsable de la calidad.

| | | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------------|--------------------------|--------------------------|--------------------------|
| totalmente de acuerdo | | | ni de acuerdo ni en desacuerdo | | | en total desacuerdo |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

42 Donde yo trabajo, el entrenamiento y desarrollo del personal para la mejora continua tiene alta prioridad.

| | | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------------|--------------------------|--------------------------|--------------------------|
| totalmente de acuerdo | | | ni de acuerdo ni en desacuerdo | | | en total desacuerdo |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |

3. Datos personales

1. ¿Cuántos años tienes? _____ años
2. ¿Cuál es tu sexo? masculino
 femenino
3. ¿Cuántos años de formación académica has cursado desde que comenzaste la escuela primaria o la enseñanza general básica? _____ años.
4. ¿Cuánto tiempo llevas trabajando en el TLSES centro logístico? _____ años y _____ meses.
5. ¿Cuánto tiempo llevas trabajando en Toyota? _____ años y _____ meses.
6. ¿Cuál es tu puesto en el TLSES centro logístico? _____

¡Muchas gracias por tu ayuda!

14. Appendix D: TST Instructions and Interview Prompt

This section shows the oral TST instructions and the interview prompt described and refers to Section 5.2.4).

14.1 English Version

TST

For this research it is important to understand Toyota through the eyes of the people that **are** Toyota. Therefore I would like to learn more about you and would like to ask you make about twenty statements describing yourself starting with "I am". Please give only statements you feel comfortable with. It is important to note that this information will be treated confidentially and will not be used in 'any other way'. It does not necessarily have to do with Toyota, for example,

- I am twenty years old
- I am a fan of the All Blacks
- I am hard-working
- I am a father of two kids

This form will help me to note down your answers. Give me your answers in the order they occur to you. Don't worry about logic or importance. Go along fairly fast.

Culture

1. How did you come to work here?
2. What is the first experience of success here? What happened and how did it feel?
3. Why do you stay?
4. What do you like about Toyota? Is there any 'magic' that makes Toyota unique?
5. Tell me about the things that sometimes make you question whether you want to stay!
6. If you could, what would like to see change around here?
7. Tell me about your most recent experience of success!
8. What do you think is Continuous Improvement really about here?
9. Tell me, in your own words, what the Toyota Way (CI) is!
10. If suddenly 5 people left your department and were replaced by new employees that have never heard of the Toyota Way, would this make much of a difference? If yes, what would you imagine would change?
11. What did you think or feel when you first heard of the quality problems that Toyota has currently?

Figure 1: English interview prompt

14.2 Spanish Version

TST

Para este proyecto me gustaría entender Toyota TLSES a través de los ojos de la gente que forma parte de Toyota TLSES. Por eso me gustaría saber más acerca de tí y pedirte que realices el siguiente ejercicio: Construye 20 frases escribiéndote a tí mismo que empiecen por "(Yo) soy..." Por favor, dame solo información con la que te sientas cómodo; recuerda que todo lo que me digas será tratado de forma confidencial y no se utilizará de ninguna otra manera. Las frases que construyas no tienen por que estar relacionadas con Toyota TLSES; pueden tratar de cualquier otra cosa. Por ejemplo:

- Soy una persona joven
- Soy seguidor del Barça
- Soy responsable
- Soy padre de dos hijos

Este formulario me ayudará a apuntar tus respuestas. Di las frases con (Yo) soy en el orden en que se te ocurran, no te preocupes por su lógica o importancia. Intenta ir de una manera más o menos rápida.

Cultura

1. ¿Cómo empezaste a trabajar aquí?
2. ¿Cuál fue tu primera experiencia/tu experiencia de éxito más reciente aquí? ¿Qué ocurrió y cómo te sentiste en ese momento?
3. ¿Por qué permaneces en la empresa? ¿Qué te gusta de Toyota TLSES?
4. ¿Crees que hay algo especial acerca de Toyota TLSES? ¿Qué significa para tí?
5. Háblame de las cosas que hacen que a veces te preguntes si quieres permanecer aquí.
6. ¿Qué piensas de la "Picking Cassette"?
7. ¿Cuál es tu centro de vida? ¿Te llena tu trabajo? ¿Es trabajar para vivir o vivir para trabajar?
8. Dime, con tus propias palabras, que es mejora continua/The Toyota Way para tí?
9. En un mundo ideal en que pudieras cambiar cualquier cosa ¿que cambiarías?
10. Si, de repente, 5 personas se fueran de Toyota TLSES y fueran reemplazadas por nuevos empleados que nunca han trabajado en Toyota, ¿habría mucha diferencia en cómo se hacen las cosas? ¿cuál sería la diferencia?

Figure 2: Spanish interview prompt

15. Appendix E: Explanation of NVivo Key Terms

This section defines some key terms of the NVivo software as used in the Research Design Chapter 5. Further explanations can be found in QSR International (2010).

Table 1: Definition of NVivo key terms

| Term | Definition |
|------------------|---|
| Annotation | Association that can be added to coding references to link in additional information. |
| Cases | In the NVivo data structure, a case represents a participant. NVivo uses a hierarchical structure of cases so that the participants pertaining to a certain work group can be combined to a bigger case which is identical to a case study in the real world. |
| Coding reference | Coherent piece of data that is coded according to a certain node. |
| Data item | A single data source in NVivo, or instance, an interview transcript or an observation. |
| Data set | All transcribed interview and workshop data from all respondents in all cases |
| Free node | Node in NVivo that has no logical connection to other nodes. |
| Node | IT entity within NVivo which represents a theme. Data can be coded to one or several nodes simultaneously. |
| Theme | Pattern within the data that corresponds to certain category. |
| Tree node | Node in NVivo that is part of a hierarchical structure of nodes. |

16. Appendix F: Case Study Reports

This section develops a chain of evidence to explain the cultural paradigm of the respective group cultures. It supplements and expands on Chapter 7 “Findings”.

The findings are grouped into sections case-by-case. Each group’s culture is characterised by means of its most salient practices, its espoused cultural values as well as the key meanings that emerged in the individual interviews and workshop. The presentation of each group’s culture is concluded with the discussion of the cultural paradigm, as illustrated in Figure 3.

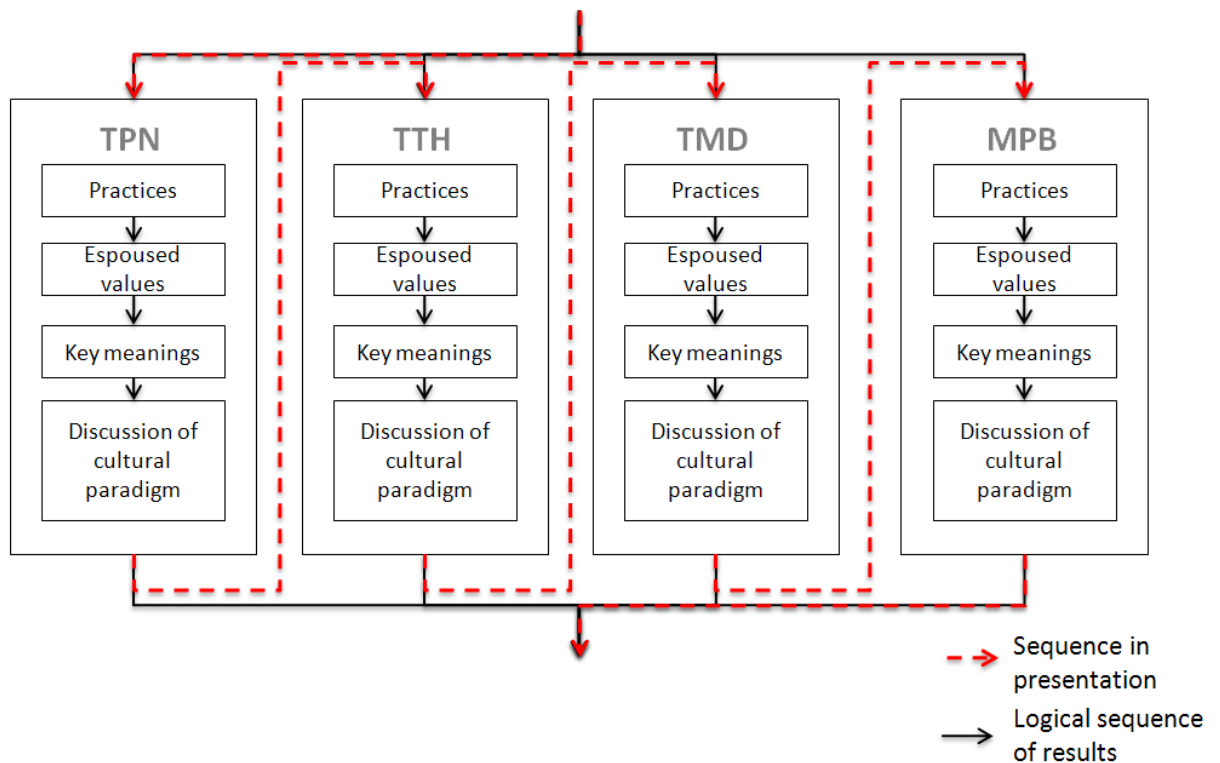


Figure 3: Structure of presentation of results

However, due to space restriction, the result can be hardly more than a bare sketch of each group’s culture in line with the purposes of this study.

16.1 Toyota Palmerston North (TPN)

16.1.1 Salient practices

16.1.1.1 Within-group communication channels

The weekly group meetings are the main means of communication within the group. They take place on the shop floor in the main working area at a dedicated time every Tuesday morning and last 15 and up to forty minutes. All group members stand in a big circle and speak in turn. It is an organisational routine in which group members receive timely feedback about current process performance and quality from the team leaders. Usually team leaders give thanks for the team's performance and individual efforts. Then process quality (in terms of the number of miss-picked items, pending orders, dealer complaints for damaged items or wrong delivered quantities) is evaluated by the respective team leader within the group. While the total number of mistakes is mentioned, the responsible for these mistakes remains anonymous. Team leaders discuss these mistakes one-on-one with the responsible team member (most mistakes are traceable back to individual team members due to individual accountability of dealer orders) at a later instance. This is followed by the announcement of upcoming events or news that may concern the group, ranging from Toyota staff meetings over health and safety meetings, forthcoming vacations of staff and the manager to upcoming visits of company representatives for warehouse equipment.

Subsequent to the announcement of events and news, group members have the opportunity to speak their mind - and many regularly do so. More specifically, the team leader asks all group members in turn whether there is something that they would like to talk about. Statements by group members can range from observations about issues in the warehouse to topics completely unrelated to the workplace, such as fundraising they are currently conducting. It is also an opportunity for group members to bring forward and expose new improvement ideas to the rest of the team

or share a concern within the group. In addition to that, they present an occasion for the team to share their views regarding both organisational and social issues. Put like this, the meeting routine can be understood as both a marketplace of ideas and a forum to show mutual respect and equality through free expression.

In addition to these weekly meetings, all Toyota staff at National Customer Centre are expected to attend the monthly staff meetings, in which issues that concern Toyota NZ are discussed.

16.1.1.2 Benefits for employees

As Toyota New Zealand explains on its website, all staff have free medical insurance, a subsidised pension plan, as well as long service and staff purchase benefits (Toyota New Zealand, 2010). At the National Customer Centre in Palmerston North, there is also a staff cafeteria. An additional benefit that illustrates the corporate bonds is the provision of vegetable patches on the company premises (Figure 4) that Toyota places at the disposal of its staff next to the warehouse.



Figure 4: Vegetable patches at TPN

16.1.1.3 Infusing work with meaning

Within the warehouse, posters with slogans like “Do more than exist - Live!” are mixed with work-related guidelines such as “Responsibility for accuracy must be with the individual doing the job” (see Figure 5 and Table 2). They illustrate the aspiration of Toyota to provide more than “a job” to its employees but a meaningful workplace.

Table 2: Content of posters displayed in the warehouse area at TPN

| |
|---|
| Do more than exist - Live! |
| Do more than touch - Feel! |
| Do more than look - See! |
| Do more than hear - Listen! |
| Do more than talk - Say something! |
| Enthusiasm - a little thing that makes a big difference |
| Laughter is the shortest distance between two people |
| Respect and support your fellow team members |
| Responsibility for accuracy must be with the individual doing the job |
| Smile |

Remarkably, some of the values that are displayed around the warehouse area on signs (see Table 2) were reproduced in a similar way in several interviews with some of the more “enthusiastic” staff.

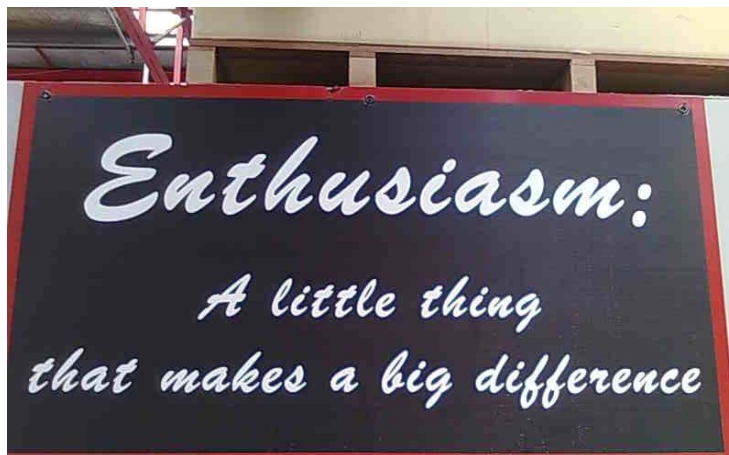


Figure 5: Example of poster in the warehouse area

16.1.1.4 Temporary workers

In addition to permanent staff, TPN employs a small number of temporary staff. According to one of the team leaders, the temporary employment agency sends only the best candidates to work at TPN. What follows is a period of several months during which the team leaders screen whether candidates are suitable to become regular employees. Although during the time period of fieldwork Toyota was not offering any temporary staff permanent employment, I interviewed many regular staff who had entered the work group via temporary work contracts. Temporary workers are paid by the temporary work agency and usually receive smaller wages than regular Toyota staff. Not being employed by Toyota, they are not allowed to the monthly general staff meetings and regularly do not receive Toyota staff bonuses.

16.1.1.5 Scheduling of tasks

Different tasks such as picking, binning, kaizen planning, training are planned and communicated with the staff every afternoon for the next day using the “Daily Control Board” (see Figure 6). It is important to note that team leaders at TPN use a hands-on approach and are involved in binning and picking just as other group members, particular at peak hours. While most workers and all team leaders are multi-skilled, they are deployed predominantly in one specific area of the warehouse such as picking, binning or containers according to their skills.



Figure 6: Daily control board to schedule and assign tasks in the group

16.1.2 Espoused values

Figure 7 contrasts the espoused values of the TPN workgroup with the GLOBE scores of the NZ society. The TPN team scores are reasonably similar to the NZ national scores with two notable exceptions: The high score in *Future Orientation* at TPN is striking. Future Orientation reflects how much a society or organisation prepares and plans for the future instead of accepting events as they occur, which indicates the emphasis on planning, stability and long-term orientation at TPN.

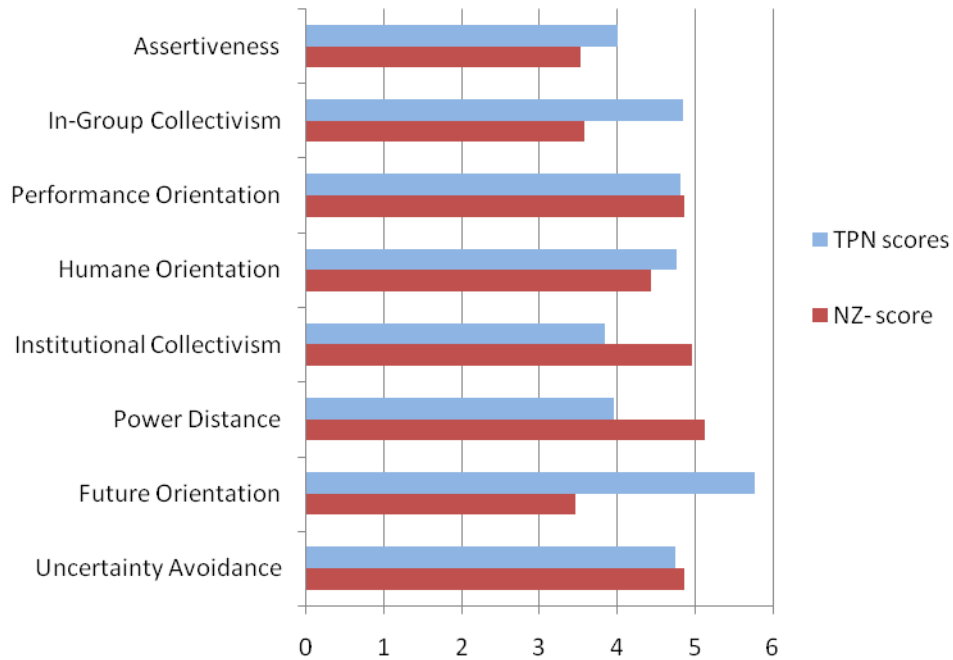


Figure 7: Juxtaposition of TPN espoused values and NZ societal values as measured in GLOBE dimensions

Furthermore, the highest amount of variability (as measured as Standard Deviation) between individual respondents was found amongst the two dimensions of collectivism: Although on average TPN scores high on these dimensions, there seems to be some disagreement as to the strength and nature of the social relationships within the group. Please refer to Appendix B for explanations of the remaining dimensions.

16.1.3 Individual meanings

16.1.3.1 Fairness

Fairness and equal treatment of everyone in the group is one of the key cultural themes in the TPN culture and surfaced in many individual interviews due to the presence of temporary workers.

Team leaders make significant efforts to equalise the conditions between regular staff and temporary workers, such as by providing them with staff uniforms, suggesting

them for “employee of the month”-type awards of the temporary employment agency, involving them in CI or other work group activities. However, basic differences in pay, eligibility for bonus payments, or the right to participate in general Toyota staff meetings, remain.

Both regular and temporary staffs are very aware of the differences in treatment. The discrepancy in perceptions concerning the nature and strength of social relationships within the group that surfaced in the survey (see 16.1.2) is also discernable in the individual interviews. While some group members express genuine pride in working with TPN, others, particularly temporary workers, are much more restrained.

One of the ex-temporary workers explained what changed for her when she became a regular Toyota employee:

Of course the pay increased, that was just part of it. I found that attitudes of the other people, the other workers, changed ... I used to get the odd comment when I was a temp. Temps don't go to the big staff meetings. I used to get the odd comment: "Ah, what did you think of the meeting? Oh, that's right, you don't get to go, you're just a temp", and little things like that. And "ah, yeah, that's right, you don't get a bonus, you're just a temp", and just little smart things, you know? Just to be smart not mean or anything. I noticed that changed.

During the group workshop I observed a lively discussion about the treatment of temps. Eventually broad agreement emerged (amongst both temporary and regular employees) about the current practice of keeping all temporary workers employed for forty hours per week although the immediate workload might not require this. This illustrates the importance of egalitarian treatment of all group members within the workgroup for the self-understanding of the group.

Likewise, pure merit pay such as an individually based bonus system according to picking performance is perceived as too disruptive by the group leaders that were

interviewed. However, different levels in performance and engagement are considered in the regular employee performance review. Thus compensation is more linked to the overall contribution, thereby stressing a sense of equality and long-term orientation. Similarly, long service benefits reward loyalty to the organisation.

16.1.3.2 Give and take

By most participants at TPN, working for Toyota was perceived as a “give and take” between an employee and the company. This is in line with Eiji Toyoda, who is reported to have said that “employees provide their precious hours of life to the company, so we have to use it effectively, otherwise, we are wasting their life” (Toyota Motor Corporation, 2002, p. 13). This conception of the relationship between the individual and Toyota has important implications on the perceived role and obligations of the individual toward the organisation. For many, working in the TPN team is more than “a job”. This is reflected in the long tenures of many team members.

16.1.3.3 Pride and accuracy

One group member explained in an interview:

I know Holden¹ don't have their Holden employees working in the parts [warehouse]. They contracted it out to another company. Their logistics is contracted out whereas we have Toyota's best interest here, Toyota-employed people. Receiving, storing, picking, pride and accuracy. Everything we do, I feel we've got more pride in the job than a contracted logistics company handling another franchise's product.

Also many other employees expressed a great deal of pride in working at TPN. This is in line with the high level of In-Group Collectivism as part of the espoused values (Figure 7).

¹ General Motors brand, competition to Toyota in New Zealand.

16.1.3.4 Autonomy

The following statement by one of the team leaders illustrates the relationship of the group with the rest of the organisation:

We can decide as a team what we want, what forklifts we want, how we want our trolleys built. How we lay-out, who we...employ. We have the decisions not on Sunday if someone starts on Monday who we don't know.... More communication in the team.

However, this autonomy can also change easily into a feeling of alienation, as the following quote illustrates: “Specially being here at the warehouse, I guess because we’ve got the uniform on. I think we are treated differently, a lot differently [by other Toyota staff]...you know, so you always feel like you are on the outside, in the warehouse”.

16.1.4 Cultural paradigm

The values deemed most typical of the group’s culture during at the group workshop (left-hand side in Figure 8) emphasise the importance of stability, the reciprocity of commitment between the company and employees, and the respectful treatment (“extra time”) of individuals by the organisation.

Although the espoused values (a relatively low level Power Distance in Figure 7) and statements in the interviews indicate fairly egalitarian power relations within the group, the egalitarian cultural theme in the workshop of “Everybody knows what he/she is doing so nobody needs to be the boss” is deemed extremely untypical (top of Figure 8). This paradox is resolved when one incorporates what is considered the function of leadership by the group. Leaders at TPN are viewed first and foremost not in terms of their hierarchically elevated position, but for their purpose of coordinating activities of the group such as scheduling “who’s picking after lunch” or “keeping the people focused, [because] people can’t worry about the overall picture all the time.”

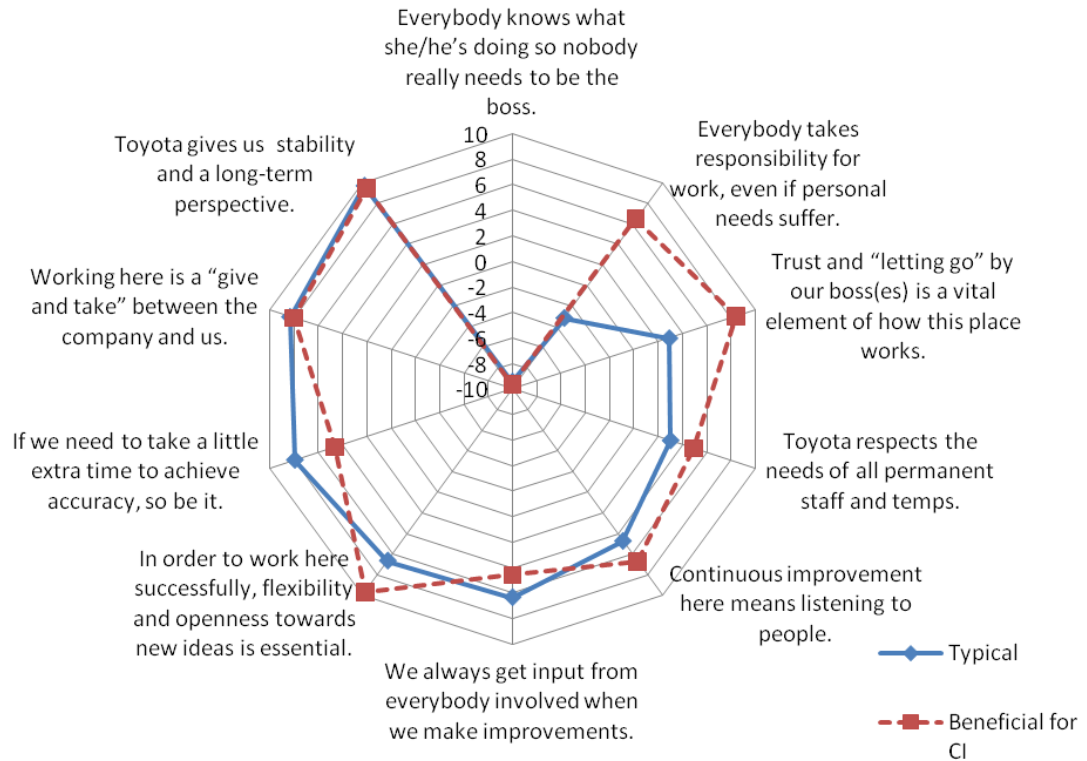


Figure 8: Selected workshop results TPN: Ten cultural themes with the highest degree of agreement among workshop participants²

In conclusion, fairness and equality between team members are the values that hold the group culture together. These values are expressed in a strong concern with differences between regular and temporary staff as well as justice in the distribution of rewards and the reciprocity in social behaviour. Relationships within the group are mature and characterised by mutual respect, to which not least the high age average in the group contributes. There is broad consensus around the importance of stability and long-term orientation as the “foundation” of the organisation, otherwise, they say, there is “no direction”.

² Although radar diagrams are very vivid way of describing the work shop outcomes, it should be noted that the line connecting the data points is technically incorrect as the cultural theme constitute discrete points so that intermediate points (as the connecting line suggest) are meaningless.

The vegetable patches that Toyota offers to employees invite associations such as “fostering long term results”, “care”, “individual responsibility”. They can be used as a metaphor for the relationship Toyota intends to establish with its employees: A garden requires care and stands for a long-term project, an enduring connection to the local community as well as a strong commitment to its employees.

Although the felt loyalty to Toyota as an organisation varied among the group members, it is fair to say that there are strong corporate bonds. The term “give and take” illustrates well that group members perceive to “meet Toyota on equal footing”: Toyota provides stability, trust, relative autonomy and a respectful treatment to its employees, and in return group members make their best effort to contribute to the aims of the organisation. But in doing so, they remain mainly autonomous, self-determined individuals as opposed to embedded in a tight social network – in the words of one group workshop participant “distinct but not separate” from the organisation. The importance of individual responsibility was highlighted during several interviews and the workshop. However, responsibility does not equal blame as this would contradict the principle of fair treatment.

Working at TPN is seen by most group members as a stable relationship with mutual benefit between the company and employees that goes beyond an exchange of work and wages. In this logic, engagement in CI is an expression of service to this relationship. On the downside, the TPN group culture is a relatively closed system and newcomers find it difficult to fit in.

16.2 Toyota Thames (TTH)

16.2.1 Salient practices

16.2.1.1 Transition from assembly to refurbishment

The assembly plant in Thames was one of the first located outside of Japan to adopt Toyota's production philosophy in 1984, long before the transition to vehicle refurbishment operation in 1998/1999. One of the managers at TTH reports:

We took a bit of Juran, a bit of Deming, Toyota, and then sort of, as I think it was president Cho [referring to Fujio Cho, Toyota board chairman 1999-2005] said, sort of the Kiwi way. Back in the heyday there we were basically, of course it has all changed now, it was pretty new when companies started to follow Japan's culture or the TPS. I remember that some of the Japanese senior execs actually felt we were the only country at that point, not now though, that had westernised or made the Toyota Production System be able to work with the culture, and get a culture.

Many of the managers of the assembly operations were re-employed in leadership positions in the refurbishment plant. However, due to the smaller size of the operations, only three management positions were available. Therefore management introduced the job title "team captain" (to replace "team leader" or "supervisor") with the motive of not "degrading" ex-managers and to introduce a more egalitarian spirit on the shop floor.

About half of today's workforce used to work in the assembly operations, and most of the workforce are multi-skilled and thus able to work in different work stations.

16.2.1.2 Staff Improvement System

The Staff Improvement System (SIS) is the main formal CI system at TTH and its creation dates back to the time when the factory was operated as an assembly plant. It gives staff the opportunity to submit improvement suggestion or raise issues (See

Figure 9). It does not involve any direct financial incentives. As a veteran explained to me:

If the company is making a financial benefit out of it, financially, down the line, the workers see the benefit out of it. They may not see it directly, but it could be indirectly.... There is a lot of people that grumble and groan about that we don't get anything but in reality we do. It's just that we don't get it out into our hands. We get it with the security of having a job, and a good ethics around here. There's [sic] a lot of people that grumble that is [sic] the ones that haven't worked anywhere else. They don't know what other places are like.

Suggestions made by staff are taken very seriously by the plant management. Thus it is effectively used as a framework for prompt and straightforward and problem resolution as opposed to formal grievances. It is therefore also perceived as a means to “gap the social distance” between the workforce and management.



Figure 9: Display of the SIS in the staff training room

Asked whether the SIS impacts the relationship between workers and management, a union representative explains:

It does impact the relationship in a good way, in a very positive way. Because it's not something that management are saying "We're putting this up and this is what you're going to do from now on!" - They actually involve them in it. You know, they are part of this program, you know, and they all go out and they all do it.

16.2.1.3 Industrial relations

In consequence, apart from being a tool for CI, the SIS has a very beneficial impact on the industrial relations as well as the relationships of the group to the rest of the organisation. The union representative explains:

This way here, they seem to be pretty proactive in regards how they deal with the union. Something comes up, straight away, [one of the managers] is on the phone to me, "This is happening" or "This is changed", "We need to do this", or whatever, "You need to come across and talk about it". They certainly talk to us before they go ahead and do anything.

The following extract of another union member reflects a similar idea:

It seems like the company likes to be involved with what is going on with the union, and they're trying to work together... whereas a lot of companies are trying to fight against each other. We're trying to keep everybody happy and trying to work out solutions that is [sic] going to benefit both sides of the party.

Management works closely with the union to ensure that grievances are dealt with fast and efficiently. A point made repeatedly by different persons in management positions is that this helps the functioning of the organisation as well as take the pressure of the employees. This is an example where the management rhetoric stressed the congruence of individual and organisation goals and thus attempts to decrease tensions between management and workers.

16.2.1.4 Process quality feedback

The team captains meet daily at the beginning of the shift to discuss the previous day's performance. This meeting hardly exceeds a length of 5-10 minutes and is hosted by the head of operations. All team captains communicate the output figures of the previous day and report on any issues. In turn, the head of production informs the team captain about any upcoming events such as quality audits, visitors or holidays.

Subsequent to this meeting, each team captain goes back to her work group and communicates the issues that were discussed within each team. In the work group that formed the case study TTH, the team captain went to all work stations separately and held several virtually identical small meetings among about 5 group members.

A group member notes:

They do keep you pretty well informed on what's happening as in the company itself, as in the dealers, how they're doing, ... how we're doing ... They keep us informed; they always keep us informed actually what's going on, most of the time I think, I can't think of anything they haven't.

Put another way, team captains at TTH have a key role for communication in the group because their position is at the interface between their team and the rest of the organisation. This means that one of their key tasks is to listen to the concerns and issues brought forward by the team members, communicate and champion them within the organisation on the level of team captains and management.

The refurbished vehicles are mainly sold to Toyota dealers all over NZ. These dealers are encouraged to fill in a quality feedback form about the vehicle they receive. These feedback forms are displayed directly at the work stations in order to provide timely and direct external feedback about the work outcomes to the group members (see Figure 10).

TOYOTA

Thames Vehicle Operations
Feedback Form
Note: Dealer use only – please remove from vehicle

To help us improve, we need your comments on the quality of your this vehicle.
Please complete this quick 2 minute form and fax it back to us.

| | | | | | |
|----------------------|----------------------------------|-------------------------|------|------|--|
| Type: Corolla | Rego or Stock No. ERJ 378 | Colour: Red Mica | | | |
| Area: | Very Good | Good | Fair | Poor | Comments: |
| Overall Impression: | ✓ | | | | Vehicle is pre-sold and new owner probably will not notice but I would like this noted in case repair is necessary or windscreen leaks. Windscreen has been replaced at some stage with a very poor fitting. Top of glass on right hand top is higher than roof and surrounding is bulging out of pillar on passenger's side. Thanks |
| Paint work: | ✓ | | | | |
| Exterior Parts: | ✓ | | | | |
| Interior Parts: | ✓ | | | | |
| Tyres: | ✓ | | | | |
| Wheels: | ✓ | | | | |
| Functions: | ✓ | | | | |
| Other (Specify): | | | | | |

Thames Vehicle Operations
A/cn: Neville Loudon
Fax number: 07 - 868-7637
E-mail: Neville.Louden@toyota.co.nz

Dealership: **Campbells**
Response required by: _____

Figure 10: Example of dealer feedback form

There is no separate quality control department; however, a thorough off-line quality inspection is done by team captains on a daily basis with a randomly selected vehicle from the latest production. All training and certification-related activities are conducted by another person.

In addition to that, team captains use a vehicle from the day's output to commute back home at the end of the work day and audit its quality. Any non-compliances are discussed in the following daily team captain meeting.

16.2.1.5 Infusing work with meaning

Similar to TPN, leadership at TTH attempts to add meaning to work beyond the immediate extend of the job. Table 3 shows the slogans exhibited in the training room and Figure 11 a poster from the recent "We believe" advertising campaign that is displayed at several places around the shop floor.

Table 3: Content of posters displayed in the training room at TTH

| |
|---|
| Respect is a reward – not a gift |
| A good supervisor is a good listener |
| The operators are the experts |
| Encouragement assists people – criticism makes them fail |
| You are the leader – you don't have to prove it |
| If you honour people they will honour you |



Figure 11: 'We believe' campaign, with scenes from a Toyota New Zealand advertising campaign

16.2.1.6 Staff selection

The transition from assembly to vehicle refurbishment operations in 1998/99 with its significantly smaller number of workers permitted Toyota to selectively re-employ staff for the new operation. The result was a selection of people that were not only were not only technically trained but also highly used to working in a CI culture. A team leader explained:

The ones we have got were very good in the previous employment, so they carried it [meaning CI] over. They were really good at introducing it and showing it to the younger people. It comes down from the older people to the younger people; the younger people are picking up so quickly now.

Today, new staff is often hired on the recommendation by existing staff. Not everyone, however, fits into a job at TTH. As one of the managers explains:

And they come in and they talk to the team captain and they go and see the job and they have the opportunity to say "Ah no, that's not for me." Or conversely, when the team captain says "Nah, he's not going to fit in." They know. They know if someone is going to fit into a role."

16.2.2 Espoused values

Figure 12 contrasts the TTH group (red) with the scores of the NZ society (blue). The TTH team scores are reasonably similar to the NZ national scores with three notable exceptions: While the scores in the dimensions of *In-Group Collectivism* and *Humane orientation* are markedly higher than the scores of the surrounding NZ society, the opposite is the case for *Power Distance*.

In-Group Collectivism measures the degree of cohesiveness in and pride of one's group, while Humane Orientation reflects the importance of ideas such as kindness, fairness, altruism or generosity within the group. Power Distance, on the other hand, refers to the degree to which people accept and expect that some people have more

power or influence in the group or society than others. It is the opposite of an egalitarian orientation.

The result indicates a strong cohesiveness in the TTH work group. Humane values are perceived to be highly important. Moreover, the low score in Power Distance indicates that team members feel fairly equal within team and to the team captain. Please refer to Appendix B for explanations of the remaining dimensions.

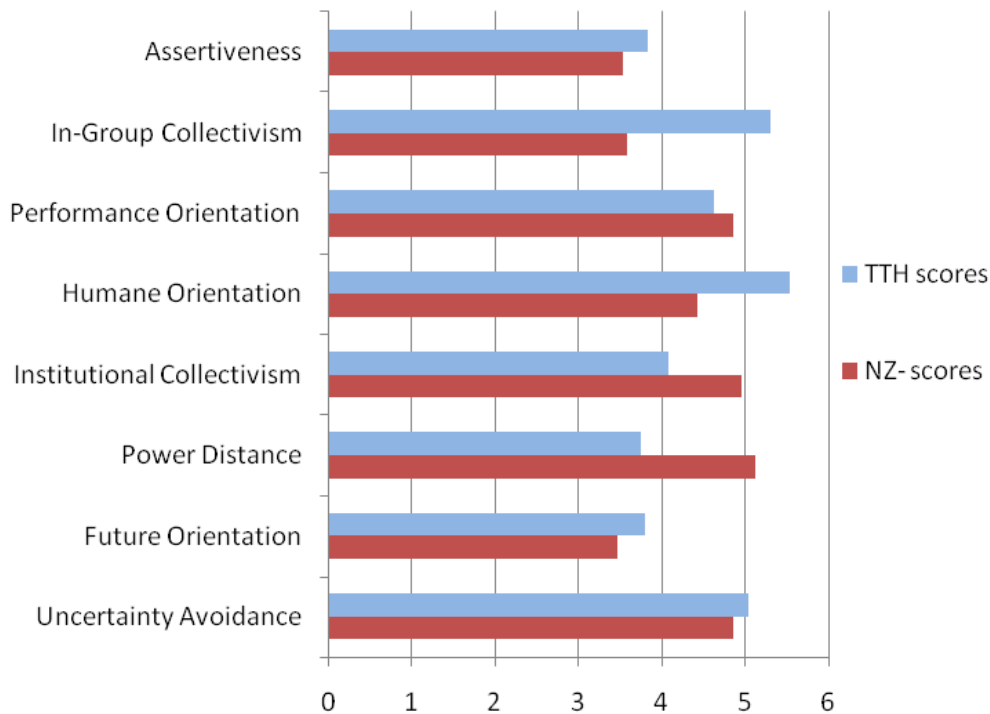


Figure 12: Juxtaposition of TTH espoused values and NZ societal values as measured in GLOBE dimensions

As part of the above-mentioned recent advertising campaign, (which features actual Toyota employees), all workgroups were asked to define a statement starting with “We believe” that sums up their department’s convictions. An example of such a statement is shown in Figure 13.

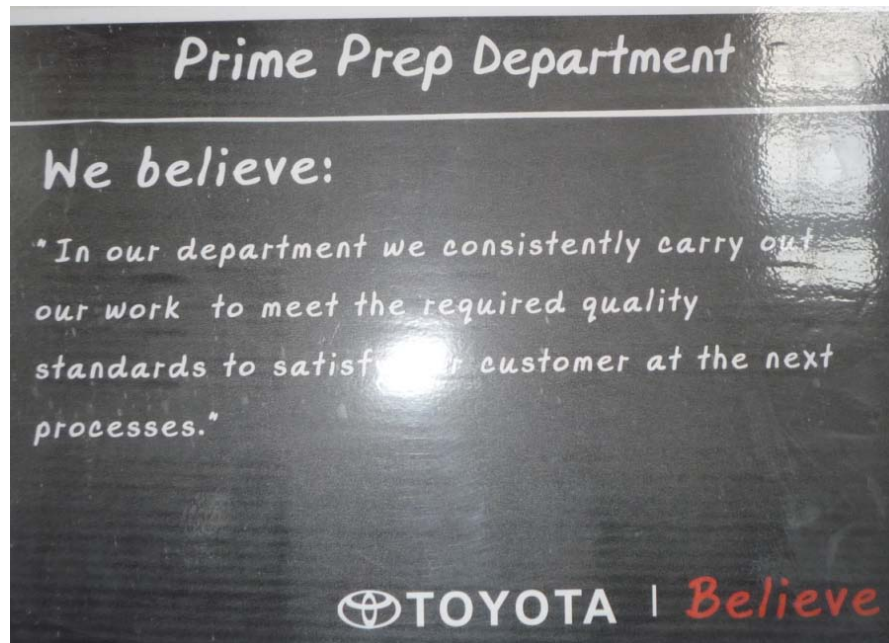


Figure 13: "We believe" statement of the prime preparation department

16.2.3 Meanings

The Staff Improvement system (SIS) was perceived as an important system that enhances communication between all levels of the organisation. For many of the team it meant an effective means "to be listened to" by management. The feeling of "being listened to" and feel involved in decisions that concern all people is paramount for group cohesiveness – the opposite can be a feeling of frustration and alienation.

16.2.3.1 Integration with the rest of the organisation

The cohesiveness within the studied team was very strong and important for the functioning of the group. However, as strong as the bonds within the team are, as easy leads a (perceived) lack of involvement in decisions outside to a feeling of alienation. Seemingly trivial issues such as the location of the employee restrooms lead to serious frustrations amongst some group members, because the decisions were perceived to be imposed upon the team.

As an expression of felt distance within the organisation, the three managers of the site are nicknamed on the quiet “The Big Three” (with reference to the Big Three in the US automotive industry, i.e., GM, Ford and Chrysler).

The following extract of an interview with a worker provides an example of how the relationship to management is perceived:

My opinion is that they want more contact with upper hierarchy. The thing is that you hear: "Well, they don't come down on the floor, you know, they wouldn't have a bloody clue." That's what I hear the most.... And it seems fairly common. One of the biggest, commonest problem really is "He wouldn't know because, you know, she talks all her crap and she wouldn't know because she doesn't even come down to the floor."

The desire for more integration within the organisation (i.e. other departments and also management) was expressed by a variety of team members and the active presence of management on the shop floor was perceived as very important.

In the worst case, this can change into a perception of “helplessness” or frustration in relation to other departments or management. For instance, one participant of the group workshop said: “That one [meaning the card] says ‘continuous improvement here means listening to people’...that’s ok if the people with whom you’re trying to improve listen, because we are still getting some of the same faults coming through to our area.”

16.2.3.2 Stability and long term perspective

Although most group members are convinced that management “do it as much as they can,” doubts about the future of the plant are ubiquitous. A recurring theme in this connection is the shutdown of the assembly operation more than ten years earlier. Personal stability is deemed highly important by most group members, as the group workshop also showed.

16.2.3.3 Fairness and humane values

Not least due to the small size of the town Thames, personal relationships between staff exist beyond the factory gates which in some case lead to resentments or suspicions on the part of other employees.

The following quote is illustrative of the patterns of meaning in relation to perceived unfairness within the plant.

There's some down here, just down here, in the service, who finish quite early, all the time. There is a bit of resentment, you know, from some of the other workers when they see that, especially when they're flat-out, but no one really says anything. So, only sometimes when a little fairness like that, when you think that's unfair. And especially, you know, because I worked in three different areas, too, you get to see them a bit more.

In this connection favouritism is hotly debated topic. On the other hand, however, social dealings between group members are characterised by humane values. One longstanding group member explains:

Toyota has always looked after their staff so if you've got a problem...I've seen people in the past that have had problems with alcohol ... They always supported you if you had family problems, if you had medical problems - no problem. When it comes down to it, they look after you. At times you're working your arse off, you used to, they look after you, they don't "On your bike!" sort of thing.

16.2.4 Cultural paradigm

In many aspects, TPN and TTH have similar characteristics: Both workgroups feature egalitarian and humane values. People are recognised and valued for their individuality; individual attitude and performance are considered highly important for the group outcome. Consequently, respect and appreciation for individual group members as well as integrity of group leaders are paramount.

As opposed to TPN, where work is seen as a stable, trustful and mutually beneficial relationship between the Toyota and its employees, working at TTH assumes more the form of a mere transaction between the organisation and its employees. As one participant put it: “You get paid for what you do.” The low score (“typical”) of the cultural themes “working here is a give and take between the company and us...” and “Toyota respects our work-life balance – in return we give Toyota loyalty” in Figure 14 is evidence that the relationship is perceived as more on-sided. Conversely, this does not imply that a mutually dependable and stable relationship between the organisation and its members is not desired and deemed necessary for effective CI, as Figure 14 also shows.

In connection to this, the changeover from assembly operation to vehicle refurbishment in 1998/99 marks a caesura in the recent history of the Toyota plant in Thames. On the one hand, the selective re-employment of staff facilitated a successful start of the vehicle refurbishment operation because staff were not only already technically trained but also highly habituated to CI from day one. On the other hand, however, closing down the assembly plant and mass-redundancy constituted a breach in the relationship with the employees – despite the rehiring of some. Consequently, a theme that emerged in a great number of interviews and the workshop is “future prospects”, which is deemed “extremely important”. In line with this, Future Orientation (see Figure 12) resulted considerably lower at TTH in comparison to TPN. The closure of the assembly operation seems to have left a scar in people’s belief in the future of the plant.

Another key theme that runs through many of the interviews at TTH is perceived social distances within the organisation. The demarcation against other departments helps maintain a positive self-image of the group. As one mentioned: “When you work in another area, you notice things...” and another one said: “We are the best!”

But then again, the perceived distance to management may lead to a feeling of

helplessness. The cultural theme “When things change around here...” illustrate the discrepancy between the actual (“typical”) and the desirable (“beneficial for CI”): While it is deemed highly important for effective CI, the group perceives its possibilities to impact as very limited (see Figure 14). In this connection the SIS is viewed as an important means for conflict resolution and to decrease social distances in the plant.

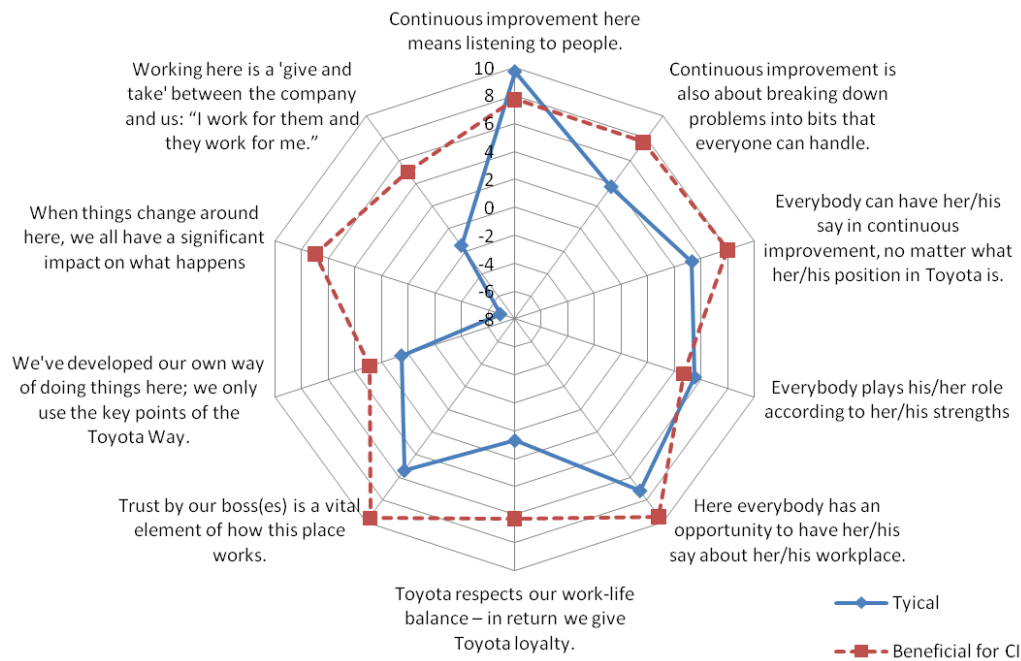


Figure 14: Selected workshop results TTH: Ten cultural themes with the highest degree of agreement among workshop participants.

In conclusion, the group’s culture at TTH is built around humane values and results in strong cohesiveness and belief in its own abilities. However, the group self-image is based partly on the demarcation to other departments or management. The changeover to refurbishment was perceived as a caesura by many group members and left its mark on the TTH culture. As a consequence, corporate bonds and the long-term orientation are not as strong as at TPN. CI is institutionalised in the form of the SIS, which is as also a means of integration within the organisation.

16.3 Toyota Madrid (TMD)

16.3.1 Salient practices

On an operational level, an important difference to TPN is the higher level of automation: When picking merchandise, workers do not have to verify the part code visually to choose the right merchandise - the scanner device does that for them. As a result, tasks are more monotonous but also less prone to human errors. What remains is the high level of task interdependence between subsequent tasks in the process chain: merchandise needs to be placed in containers (such as trays, crates or boxes) in specific ways that are ergonomically convenient, clearly visible, accessible and safe for workers doing the consecutive task. The following practices are particularly noteworthy.

16.3.1.1 Job rotation to prevent fragmentation into subgroupings and enhance cooperation

Unlike TPN, where positions in the warehouse are assigned permanently to the same persons, TMD conducts a continual rotation of jobs. In order to prevent clustering into subgroups and counteract ingroup favouritism effects³ within the group, the warehouse management re-assignment all positions within the process chain for the work group members on a monthly basis (see Figure 15). Likewise, supervisory positions are rotated but at a different rhythm to prevent workers from continuously coinciding with the same direct supervisor.

³ Ingroup favouritism can be defined as “preferential treatment of members of one’s own group and the discrimination against out-group members” (Yamagishi, Jin, & Miller, 1998, p. 315).

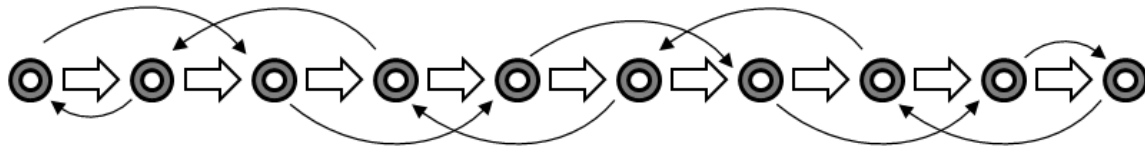


Figure 16: Schematic description of job rotation (without consideration of qualificational constraints such as forklift driving licenses; straight arrows represent chain of task, round arrows represent sequence of monthly job rotations. Note how with every rotation, upstream and downstream neighbouring positions are exchanged)

16.3.1.2 Reinforcing and purposefully using corporate values

Like in the other observed Toyota work groups, the values underlying the Toyota Way are constantly reinforced: Not only are they publicly displayed and explained, but they are also very frequently repeated in everyday discourse and an essential part in individual performance appraisals. Reference to these values is constantly made to define adequate behaviour. A manager stated:

It's not only Respect to say "Good morning" – it doesn't stop there. It's also built into the operations" and further: "'Respect for People' in our operations means that you are to do your job properly.... That means you are respecting your partner that is coming to do your previous job.... That is respecting as well. If you leave things disorganised or 5S is not carried out, then you are not respecting your partner, your team member.

The supervisor explained in a subsequent interview: "For us a lack of Respect is being unpunctual, as we begin work at half past eight so that the person who is not here at half past eight shows a lack of Respect for her colleagues in "Toyota terms".

Yet another supervisor added "Another form of 'Respect' is that ... the person who does binning has to leave the parts well sorted so that when another person does picking, she finds them well – you have to leave it in the same way you would like to find it".



Figure 17: The values of the Toyota Way displayed in Spanish at TMD

With regard to another value of the Toyota Way, Teamwork, she explained further: “Here Teamwork implies that everything has to be sorted, well arranged so that the next person [in the process chain] can do the job even better. I might lose one second but perhaps I make my colleague gain three seconds”. Later she explained another aspect:

When we do the performance appraisal every four months, we can tell her, [for instance], that she will be evaluated better in Teamwork. Why? “Because there was a problem and you have volunteered to come to work” ... and this is Teamwork in a way because if today there is a lot of work, the operations go pretty badly and all the colleagues are affected because everybody has to work amongst a lot of merchandise; doing things takes longer.... If a person then raises the hand to come help it is because it is a person who thinks of her colleagues.

These examples illustrate how reference is made to the values of the Toyota Way to induce behaviours. This informal mechanism is based on seemingly subtle nuances in the managerial interpretation. Leaders do not simply articulate desired behaviours but purposefully use the values of the Toyota Way to establish behavioural norms within the group. More specifically, leaders reframe desired behaviours by linking them to values of the Toyota Way. In turn, they subtly reshape the meaning of the

corporate values to better fit the operational requirements and consequently use them instrumentally to demand desired behaviours.

The interpretability of the corporate values provides leaders also with flexibility in new or unexpected situations where helping between group members is required to compensate fluctuations or imperfections in the system. As a manager explained:

'Respect' is something that you can see well during the team briefing. If a person has a problem and the others help her, they show Respect and Teamwork... so it is important to make everyone see during a briefing that someone has a problem so that all help her, this is fundamental".

Furthermore, reference to a recognised norms and values underlying the corporate philosophy enables leaders to achieve consensus in controversial decisions: on one occasion, I witnessed a lengthy discussion amongst the workforce about a newly suggested improvement. Not all of the workforce were convinced of the usefulness of this particular suggestion (its purpose was to highlight the correct position of a parts through the use coloured adhesive tape). Despite the presence and intervention of both supervisors and managers, the discussion continued for several minutes. Only when it was mentioned by one of the leaders that this improvement was "very visual", the hitherto lively discussion ended abruptly. "Visual" had a clear and positive meaning within the group around which consensus was quickly built.

16.3.1.3 Gaining credibility for corporate values

The corporate values can only be used to guide behaviours because they are *meaningful* to organisational members. Therefore a key feature is reciprocity: in order to demand Respect and the associated behaviours from individuals without inducing cynicism, the organisation has to demonstrate Respect toward individuals. It does so by taking the centrality of family and social life in Spain (O'Connell, Prieto, & Gutierrez, 2008) explicitly into consideration – working overtime is on a voluntary

basis other than is the case in many other organisations. As one of the managers explained, “in Toyota (...) here nobody is obliged to work overtime because there is too much work. When the end of the working day comes, everybody can go home, even if there’s much work left”. Similarly, the enormous importance Toyota places on employee safety was perceived very favorably by work group members. In this way the satisfaction of social and safety needs does not directly impact behaviours, but its neglect would impede more sophisticated measures.

16.3.1.4 Standard Operations Procedures as consensual contracts

Standard Operations Procedures at TMD are designed as symbolic binding contracts between the workforce and the organisation for a *consensual* agreement of a way of working. I witnessed the implications of this practice at one occasion where there was at first much debate about the effectiveness of one particular practice at a team meeting. The discussion was easily resolved when the present leaders reminded the team that it was “what they wanted in the first place”. One manager explained to me that “it's more than a SOP; it has an implied value... Apart from being a SOP or work standard it implies Respect for the person that comes next [in the process]. They know it because many times these SOPs result from a complaint of themselves”. This is another example of how leaders deliberately attempt to change the perception of SOPs by “infusing” them with value using the corporate philosophy.

16.3.1.5 Weighing group and individual-level incentives

The incentive system involves a financial bonus that is based on both individual and group level criteria. While group level goals refer to overall system performance, individual level goals consist of three different components: firstly, employees are evaluated according to their demonstration of knowledge and application of the values of the Toyota Way. Secondly, each employee is expected to bring forward a minimum of two improvement suggestions per year, whereas the bonus is not related

to the financial impact of one's suggestion. Since suggesting improvements also demonstrates commitment to the corporate value of Kaizen and Challenge, this criterion partly overlaps with the first. Lastly, employees are evaluated for the individual work quality. This criterion includes both housekeeping (5S) and the number of mistakes (wrong parts or incorrect quantity picked) committed by an employee. While individual level rewards seem to be counterproductive in systems of high task interdependence (Wageman & Baker, 1997), a more careful consideration reveals that even these individual level criteria refer indirectly – mediated by the effects of job rotation – to group level outcomes.

It is striking that none of these individual level criteria is related to individual operational performance measures such as the picking rate etc., although the existing IT infrastructure would clearly permit a detailed performance evaluation of individuals. Discrete performance goals are rewarded only on the group level. However, individual performance rewards would lower the incentive to formally suggest and implement process improvements, because in a system of job rotation individual workers do not fully benefit from their own suggestions as they switch tasks frequently.

Instead, evaluation criteria on the individual level reward cognitive engagement in the group (represented through corporate values and improvement suggestions) and cooperative behaviours. In line with that, van Knippenberg (2003) suggested that cooperative goals are an important means to establish a new “team identity” in the context of intervention strategies such as job rotation that aim to break down ingroup-outgroup categorizations.

16.3.2 Espoused values

Due to restrictions on part of the organisation, the survey results of the espoused values are based on only two responses (however, the survey respondents were not

identical with interviewees) which varied widely. This limits their validity of the results so they should be treated with caution. However, there was consensus around the importance of Uncertainty-Avoidance as well as Performance and Future Orientation (Figure 18), which highlight the importance of planning, structuring, striving and investing in the future.

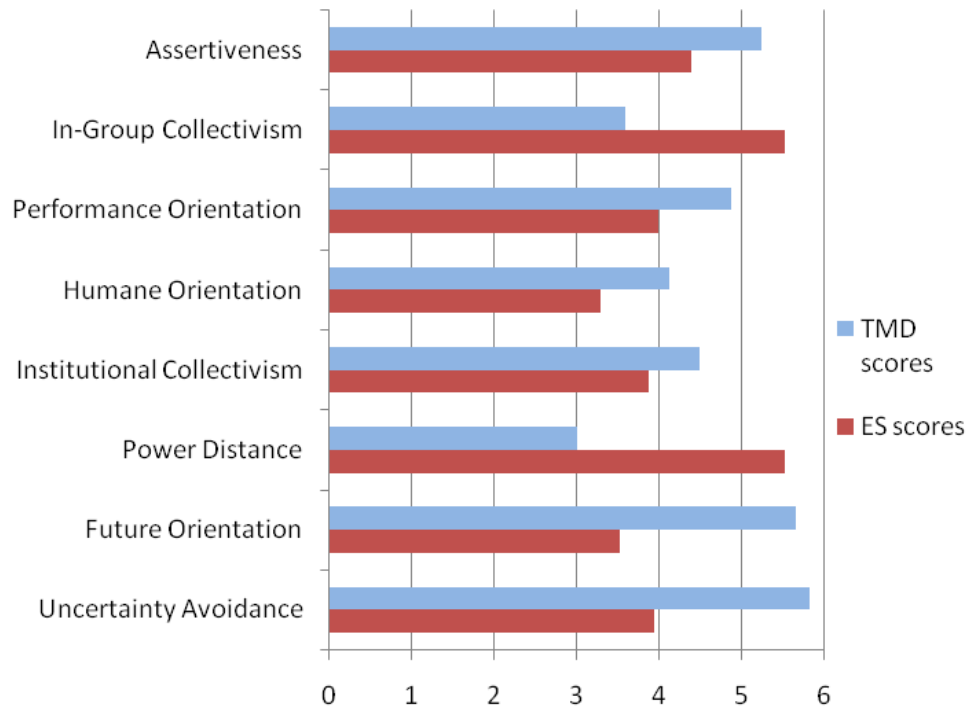


Figure 18: Juxtaposition of TMD espoused values and Spanish societal values as measured in GLOBE dimensions

In contrast, there was substantial disagreement in the responses about dimensions concerned with social relationships within the group, namely Humane Orientation, Institutional and In-Group Collectivism. The high degree of dissent may indicate tensions within the group.

16.3.3 Meanings

16.3.3.1 De-personalised work relationships

Due to the largely deviating perceptions about social relationships in the group that emerged in the survey, an important aim of the interviews at TMD was to explore how the interviewees experienced the continual rotation of jobs and the nature of social relationships within the group. One explains:

I normally try to make my best... I propose a lot of ideas, improvements, whenever something can be improved for work, for our own good and for the good of, to go challenging, to go faster...

Similarly, the following extract explains how the individual copes with the “deprivation of social interactions” during working time through job rotation by viewing work as a constant personal challenge:

If you come with the mentality... to make friends, or that colleagues are there.... You do not have to say that you cannot talk but if you get a [task], if they put you to do something ... you will have to do it in the shortest time your human faculties can do.... I take it, I take my work as my challenge.... I do like to do things almost always in a rhythm... I mean I take this here, I put it there, so, so, a “hello, how are you?”, very well, let’s go, let’s go, I mean the rhythm, methodical.

Notably, “Challenge” is one of the five core values of the Toyota Way that is strongly endorsed at TMD.

The following extract provides another example of how group members experience the de-personalised work environment.

We often forget that work ...at the end of the day it is work, but I think we have to approach it like it is a job and consequently we are being paid for this job.... We do not come for a chat, when we go chatting to our friends. When we talk, when we go

with our friends... we go to our house or we go to a bar... but here we come with a purpose and the purpose is to accomplish things, do them well.... That's why you get paid.... OK, try to get along with everybody, if you cannot then that's it ... You can't [make friends] and get along with your job.

16.3.3.2 Internalisation of corporate values

The next quote gives some indication about whether the meanings constructed by the leaders are actually accepted and internalised by the workforce, in this case referring to "Teamwork"

What happens is that we should be aware that we... come to work and get something [done] I may be doing better or worse, or better or, better doing something with certain people or more... with others, but what we have to make ourselves aware of is that this needs to get done by all.... This is not an individual work, ... this is teamwork, we cannot be making things difficult to a co-worker ... because I do not talk to her... or because she's my best friend.

Put another way, this worker expresses the view that any personal relationship, be it friendship or repulsion of other individuals, is detrimental to teamwork – quite a remarkable view in a society like Spain where relationships are very closely knit and certainly very different from the following case study MPB.

16.3.3.3 Performance

With regard to performance measures, one of the managers at TMD stated self-critically:

To tell you the truth: I've been twelve years in this company, and I don't think we will ever come close to the way Japanese are doing things. I think there is also a cultural aspect built in. You cannot change cultures. At least we try to get closer, but we are very far because of the cultural differences.... You go to Japan, and I've been to Japan several times already, visiting Toyota facilities and so on. And I'm amazed

how they do things. It's not that we cannot do it, but it's that people will not be able to understand how come they are so *dedicated* [stressed] to such small things. That's what makes the difference. We follow the Toyota Way, we follow "Quality is number one" in our company, we try to eliminate anything that is waste, try to get rid of as much as possible. But if you compare.

And continued:

When we compare logistics here and in Japan, they differ a lot. Again, that is the cultural differences that are impacting all this. But if we translate it into Spain, and compare [other] companies within our territory, there is a big difference of course. So we are talking about: We are in Spain, same culture but because we have all these mechanisms that come from Toyota, it makes us different from the rest. So we have achieved great part of it.

16.3.4 Cultural paradigm

Continual rotation of jobs within the group is used to cut across social group boundaries in order to mitigate ingroup favouritism effects. However, with strong social relationships and the associated levels of interpersonal trust intentionally removed, the workgroup requires a new basis for effective functioning and to fill that "relational void" that job rotation left. The corporate philosophy, particularly with its constituent values of Respect and Teamwork, becomes a normative institution that is purposefully used by leaders to reframe work relationships.

Likewise, behavioural norms in the group are defined by leaders in ways that link the corporate values to functional aspects of the organisation (e.g. punctuality, order, housekeeping, next process quality, readiness to work overtime). To enhance their salience, corporate values are embedded in behavioural routines (rituals) such as daily team briefings and performance appraisals.

By referring to these values, leaders are able to *purposefully construct meanings* and

normative obligations and thus define acceptable behaviours in the group. Behaviours of individual group members such as punctuality, mutual help or orderliness are thus infused with these values. In this logic, an orderly workplace or punctuality or working overtime when required become more than functional exigency – become a *moral* obligation of the individual toward the group – failure to do so would mean lack of Respect and Teamwork.

Put another way, these corporate values, which are for themselves hard to argue against, are elevated to define “right” and “wrong” (behaviours) in the group. Breaching this obligation would lead to exposure in front of the group and also imply long-term sanctions in terms of financial loss (through negative performance appraisal). Thus the corporate philosophy becomes a normative institution that used instrumentally to entrench desired behaviours in the group and to sanction deviant behaviour.

However, a number of unambiguous comments disclosed from a number of participants on the quiet suggested that a humane, people-centred leadership style is not endorsed by all leaders at TMD to the degree as in the other Toyota work groups. Having “Respect” as part of the corporate philosophy does not necessarily imply respectful behaviour by leaders. Thus this case demonstrates both the power and limitations of a corporate philosophy such as the Toyota Way.

The frequent switch of immediate co-workers through job rotation shifts the nature of relationships within the group from close, friendship-based (and selective) relationships, toward less close, more egalitarian, formalised relations between colleagues.

In summary, the culture of the work group TMD can be understood as a highly formalised work system with purposefully depersonalised work relationships that is held together by vigorously implemented corporate values. In a manner of speaking,

individual group members are interchangeable parts in an abstract structure⁴.

In this logic, CI is something that you do because you are required to by your employer – they make the rules and pay you. At best, it is something that you do for the sake of the “drive from within” such as personal challenge.

However, this “counter-cultural” approach to organising can also create tensions. As Brewer and Yuki (2007) noted, “in cultures where in-groups are primarily defined as relational networks, well-being and self-esteem maybe more closely associated with enhancement of the quality of relationships and relationship partners” (p. 314). If work relationships are purposefully depersonalised, this may also deprive employees of opportunities for meaningful social interaction at work. Indeed, the warehouse management reported an excessive sickness absence rate of almost 25% among the workforce with several of those absent for psychological reasons. However, it is impossible to tell whether the tensions that were noticed during fieldwork are the result of excessive managerial control or the impending relocation of the entire operation to another site about 70 km away in 2012, which was being discussed during the data gathering period.

⁴ It should be noted, however, that most of the leadership team at TMD made also a considerable effort to show interest in the individuals in the team and understand the different the individual requirements.

16.4 Multipueblo Barcelona (MPB)

16.4.1 Salient Practices

16.4.1.1 Total Productive Maintenance initiative

The production site of which the MPB work group is a part of has been certified to both ISO 9001 and ISO 14001 since the year 2000 and continues to be certified to both ISO quality and environmental management standards. The next step in Multipueblo's effort to implement CI in the organisation was the start of a Total Productive Maintenance (TPM) initiative in 2004 which comprised significant efforts to involve people in CI activities (dedicated meetings, cross-functional improvement teams and a suggestion system). However, these efforts were reduced significantly or discontinued altogether when the business entered a time period of difficulty during the worldwide economic downturn 2008. Organisational resources to run the suggestion system and other CI tools were reduced while the general workload on the staff increased due to considerable job cuts.

16.4.1.2 Lack of continuity

It is important to note that in none of the Toyota cases, fear to lose one's job was brought up by the interviewees – as opposed to MPB. The following statement encapsulates the frustration of a MPB manager with regards to the state of CI:

They [upper management] did not actually believe in the philosophy... and this is the worst that can happen to this system, because I know a lot of people ... disappointed with that. ... I also know many people... annoyed really... working under the pressure of these systems, of these audits which are so... so strict ... pressures are... big.... But because it becomes the end, the end is the audit, not to implement the system. If on top of that you have to meet that goal and also ... you have no conviction, the tools implemented are not effective then ... [this] creates a tremendous stress on you.

And further:

If we start from the assumption that what makes the difference in a company are the people, if every time you have a moment of crisis what you do is attacking the resource which is easier to count, then you are attacking the basis that supports the system... and also what you do is... to create... distrust among the other workers that are left, because you yourself have drained confidence in what you had said before, we've had here the experience of implementing the 5S the TPM and they are kaizen tools.

16.4.2 Espoused values

While the high score of Humane Orientation and low score of Power Distance (Figure 19) are in line with the salience of personal relationships at MPB, the relatively low score of In-Group Collectivism is striking and seems to contradict the strength of interpersonal relationships in the group I observed. As subsequent interviews revealed, however, this is can be explained by the fact that the strong interpersonal ties only refer to friendship ties within the overall workgroup but not necessarily the whole group, which is tapped by the In-Group Collectivism construct.

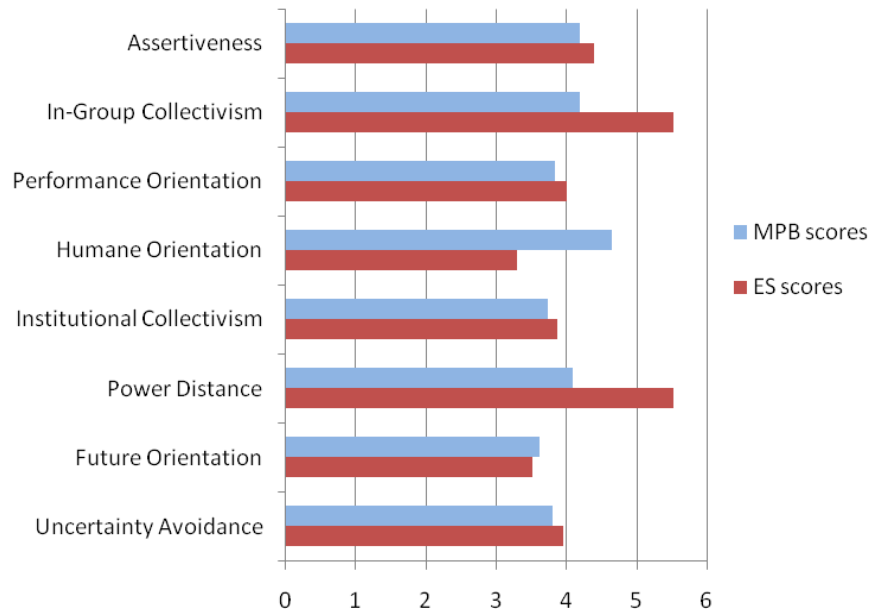


Figure 19: Juxtaposition of MPB espoused values and Spanish societal values as measured in GLOBE dimensions

16.4.2.1 Meanings

16.4.2.2 Individual integration and group separation

One of the team leaders explains what she considers necessary to motivate the people of her work group.

You have to be with your people always, I mean ... it is clear I will be with [the area manager], that is clear but I have to give the impression that I will be with them....But I have to give the impression that I am with them to death ... and [proof it] with facts, I mean with facts, I mean if I have to, for example I don't know, I make it up, if, if we have to stop and not produce or do maintenance, I stop with them, you know.... But why? It's because I have to be with them.

The following extract explains provides further evidence for the strength of relationships with the group:

Those people are with me and... I mean I know there are people in my group that

would come to work without getting paid and that's hard, I mean that is not my goal, but I know they would do it for me [but] they would not do it for the company.

However, not all group members are equally well integrated in networks of social relations within the group. One said:

There are good relations between colleagues. Now I tell you one thing: when I get out of here, I try to get out of here.... My circle of friends... is not related to Multipueblo. This is an important thing for me.

When looking at relationships between different departments within the work group, the picture is different. The following extract provides an example:

That is something that I also see here, eh! There's little cohesion between departments. We all go to war, but each one goes as part of a single battalion, you know, one goes this way, the other goes that way, and if I can I shoot you, you know, you get shot from one side, but nobody knows who did it, that works here too [laughs]. It's a pity but it's true that works, too, and sometimes, well, things could work much better if we all went together.

Another group member adds:

I do not know how to explain this, there is a lot of communication between departments to improve.... I think the communication is between departments at a boss' level, because here, then we are never asked about anything, at least to me, they communicate among themselves but they do not come to ask you.

16.4.2.3 Frustrations

Although there is clearly a deep managerial understanding and commitment to the concept of CI amongst the workforce of MPB, its state of implementation does not fully reflect that. One of the main proponents of CI at MPB seems apologetic about the partial failure of CI since the staff redundancies:

If you ask me I know where all the faults of the factory are and where all the things that are well, ok, but why are they there? Why are they not improved? ... Because I have no time, because I have no people, because they do not give me the means!

And further: "They hear but they do not listen!"

A worker noted:

People, people are willing, actually they've always done what they've been asked to do ... they get involved...but always, it always has been the people who have been involved, always, I mean, every time they've been asked they have done it in every sense and every scope ... What happens is that people do not see on the part of the company...eh, I don't know, something, not only to say gratefulness. I don't know, we don't see the company predisposed toward the workers.

Although the attempt to implement CI has been the only formal initiative in two decades, there is now a widespread scepticism amongst the workforce with regard to management initiatives.

Although in the interviews, people told me about considerable enthusiasm about CI amongst the group members when TPM was first introduced, the situation changed drastically when the company dismissed staff and reduced other resources for CI in the course of the economic downturn. Some go as far as to say:

[CI], it has never been carried out... I mean, there was a time when it was, but I tell you something, it can be carried out but as soon as they started to cut down on staff...you can't without human resources, you can't ask ... people to work twice as hard, to be at the machines where they take, every 5, 6, 7, 8, 10 machines, boxes, colouring, and so on and so on and ask them to have a maintenance and a cleanliness or tidiness at the machine (...) it's impossible because of that, I think so before anything else, the 5S did not work out at all.

16.4.3 Cultural paradigm

The culture of MPB revolves around a group of factory veterans bonded together by past successes and long tenures. Instead of a homogeneous group, the relationships are best thought of as a relational network: Often in leadership roles within the group, the veterans occupy knots in this relational network of strong interpersonal relationships. Thus sub-groupings are often, however not always, in accordance with departmental subboundaries within the group (Figure 20).

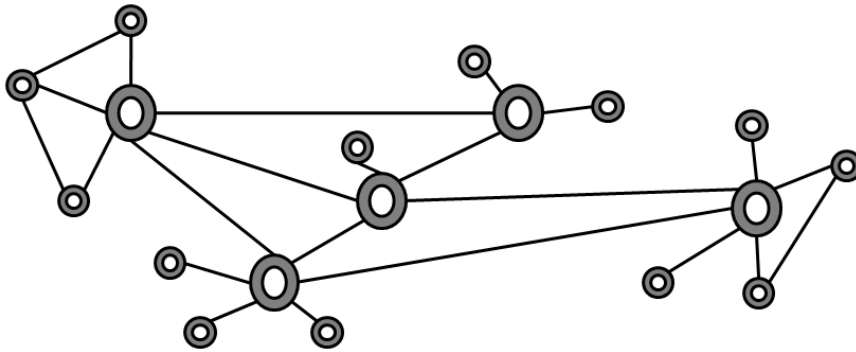


Figure 20: Schematic description of group structure (Large knots represent factory veterans and small not represent remaining employees, connecting lines represent strong interpersonal relationships)

Consequently, lateral communication and negotiation rather than hierarchy are used as integration mechanisms within the group. Being aware of strong interpersonal bonds, leaders use team camaraderie as a way to generate individual efforts up and above the normal work load that material incentives alone cannot achieve.

Put another way, leaders try to achieve that people think of their work team members as part of their cultural ingroup and are therefore ready to “go the extra mile”.

However, these interpersonal relationships are full of tensions and contradictions and can also lead to breakdowns when work necessities do not coincide with strong relational ties between employees.

One measure for these contradictions is the intensity of controversies between group members: On several occasions “day-to-day” business was described using a “war”-metaphors in the interviews: the words *luchar* (= to battle), *pelear* (= to fight) and *guerra* (= war) are used frequently.

The ambiguous role of group relations also surfaced clearly in the workshop: To be sure, personal friendships were considered strong motivators to “go the extra mile” at MPB (see bottom of Figure 21). However, at the same time there was broad consensus that work relations based on friendship were very detrimental to CI because they were thought to undermine any efforts to systematically organise work (see theme “When’s it’s necessary to make an extra effort, we do it because we are mates”).

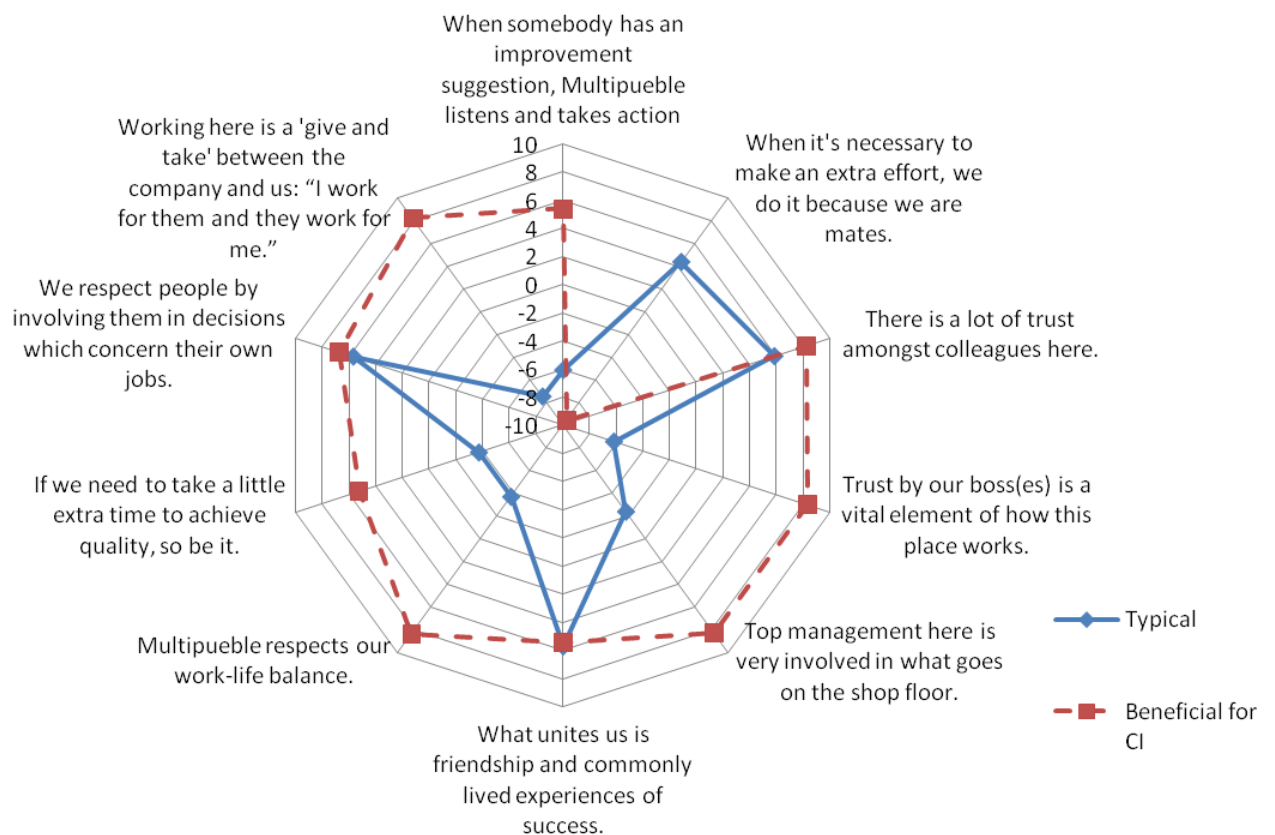


Figure 21: Selected workshop results MPB: Ten cultural themes with the highest degree of agreement among workshop participants.

In other words, camaraderie within the group is seen on the one hand as essential for group cohesiveness and a powerful motivator, however, it is also perceived as a way to bypass systematic procedures and to create an obligation to work long hours.

The economic downturn and the consequent cutback on staff and other organisational resources for CI resulted in a significant reduction of CI efforts and widespread frustrations within the group. In terms of its CI culture, this meant an interruption in the learning and acculturation process through which CI values and behaviours were supposed to be internalised.

In reality, often the rhetoric of top organisational leaders at MPB about CI surpasses the actual implementation. As Figure 21 shows, the discrepancy between the desirable and reality are perceived to be substantial with regard to several cultural themes; particularly a balanced mutual relationship between the organisation and the employees, trust, absences of pressures and a balance between work and life were perceived as essential for CI but largely absent at MPB.

Slogans such as the one displayed in Figure 22 stand in contrast to the organisational reality and consequently give rise to cynicism amongst the workforce. Perhaps the state of the poster in Figure 22 symbolise well the state of CI at MPB: implemented but partly in disarray.

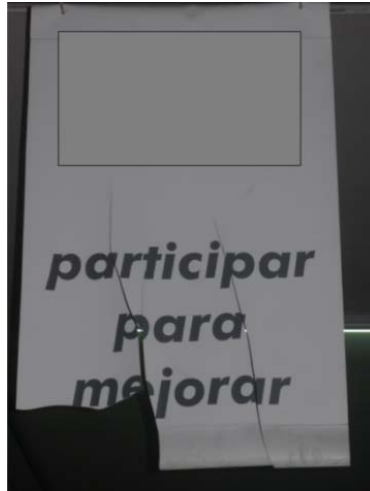


Figure 22: Torn poster "Participar para mejorar" (Spanish for "Participate to improve"; Multipueblo company logo effaced)

Management of the site is clearly located outside the core group and plays only a minor part in the day-to-day functioning. Consequently, the psychological ownership of CI is not with group: Individuals engage in CI activities because they are convinced of the need for improvement as individuals or to support a workmate to which they have a strong personal relationship. In cases where CI is not institutionalised in organisational procedures - it does not happen.

17. Appendix G: Equivalence of the Twenty Statements Test Across Languages

This section describes an adjustment that was made as part of the analysis of the TST to ensure equivalence of conditions for English- and Spanish-speaking participants (cp. Section 7.11).

Table 4 shows the arithmetic means of the individual results in all four case studies after initial analysis.

Table 4: Initial results of the TST across case studies

| Case | Number of interviewees | Salience of self-concept | | | Total |
|------------|------------------------|--------------------------|---------------|---------------|----------------|
| | | personal | relational | collective | |
| TPN | 9 | 64,85% | 20,09% | 15,06% | 100,00% |
| TTH | 10 | 67,77% | 17,58% | 14,65% | 100,00% |
| TMD | 2 | 59,29% | 35,71% | 5,00% | 100,00% |
| MPB | 9 | 76,91% | 14,52% | 8,58% | 100,00% |
| All | 30 | 69.07% | 18.62% | 12.31% | 100,00% |

While conducting the TST as part of the Spanish case studies, a systematic measurement issue arose due to an idiomatic difference in the way people express their age in Spanish in contrast to English language. It should be noted that language-related issues have been only insufficiently covered in the literature and with the pilot case study located in NZ, this issue remained undetected until the main cases.

In Spanish, people state their age as “Tengo ... años” (with “tengo” being the 1st person singular form of the verb “tener” meaning “to have” and “años” meaning “years”). Translated literally to English, people thus say “I **have**... years” instead of “I **am**... years old.” Therefore Spanish-speaking interviewees have no possibility to express their age as a valid TST statement (because by definition, TST statements start with “I am” or in Spanish “Yo soy”). In contrast, the statement of age is the single most frequent statement given by NZ interviewees.

Therefore this idiomatic difference between English and Spanish creates a systematic bias in the answers. More precisely, with age being a statement that is categorised as contributing to the personal self, it potentially makes the self of Spanish-speaking participants appear “less personal” than it would have been the case had they used the English language.

Fortunately, this bias was relatively easy to eliminate. In order to eliminate the systematic difference between the answers between Spanish and English-speaking interviewees, I removed all age statements (“I am... years old”) from the answers of the NZ participants and re-ran the analysis. The slightly modified results are displayed in Table 5 and were used for the remainder of the thesis.

Table 5: Final results of the TST across case studies

| Case | Number of interviewees | Salience of self-concept | | | Total |
|------|------------------------|--------------------------|---------------|---------------|----------------|
| | | personal | relational | collective | |
| TPN | 9 | 63,30% | 21,09% | 15,61% | 100,00% |
| TTH | 10 | 64,05% | 19,70% | 16,25% | 100,00% |
| TMD | 2 | 59,29% | 35,71% | 5,00% | 100,00% |
| MPB | 9 | 76,91% | 14,52% | 8,58% | 100,00% |
| All | 30 | 67.37% | 19.63% | 13.01% | 100,00% |

18. Appendix H: Enabling Versus Inhibiting Meanings

This Appendix lists the coding nodes used for the analysis of enabling versus inhibiting meanings (cp. Section 7.4.2.1).

18.1 Enabling Meanings

Table 6: Enabling meanings

| Enabling meanings |
|---|
| Coding 1.1\Perceptions\Authenticity |
| Coding 1.1\Perceptions\Autonomy |
| Coding 1.1\Perceptions\Being looked after |
| Coding 1.1\Perceptions\CI as an internalised way of life |
| Coding 1.1\Perceptions\Contributing and therefore taking ownership |
| Coding 1.1\Perceptions\Co-operation within group |
| Coding 1.1\Perceptions\Decisions\Being involved in decisions |
| Coding 1.1\Perceptions\Decisions\Consensus |
| Coding 1.1\Perceptions\Employees assuming responsibility |
| Coding 1.1\Perceptions\Ethics |
| Coding 1.1\Perceptions\Feedback |
| Coding 1.1\Perceptions\Give and take by the organisation |
| Coding 1.1\Perceptions\Individual advancement & self-development |
| Coding 1.1\Perceptions\Initiative |
| Coding 1.1\Perceptions\Leadership\Cooperative leadership |
| Coding 1.1\Perceptions\Leadership\Direct contact |
| Coding 1.1\Perceptions\Leadership\Humane leaders, interest in the individual |
| Coding 1.1\Perceptions\Leadership\Ideal leader |
| Coding 1.1\Perceptions\Motivations\Individual accountability |
| Coding 1.1\Perceptions\Motivations\Inherent motivation |
| Coding 1.1\Perceptions\Motivations\Money and material benefits |
| Coding 1.1\Perceptions\Motivations\Not letting the team down |
| Coding 1.1\Perceptions\Perceived respect towards people |
| Coding 1.1\Perceptions\Performance & improvement orientation |
| Coding 1.1\Perceptions\Personal growth |
| Coding 1.1\Perceptions\Pride in and identification with the organisation |
| Coding 1.1\Perceptions\Stability & security |
| Coding 1.1\Perceptions\Stability & security\Structured approach within organisation |
| Coding 1.1\Perceptions\Trust |
| Coding 1.1\Perceptions\Work variety |
| Coding 1.1\Perceptions\Work-life balance |

18.2 Inhibiting Meanings

Table 7: Inhibiting meanings

| Inhibiting meanings |
|--|
| Coding 1.1\Perceptions\Blame |
| Coding 1.1\Perceptions\CI or TW NOT providing meaning to individual |
| Coding 1.1\Perceptions\Frustrations & Resentments |
| Coding 1.1\Perceptions\Frustrations & Resentments\Abuse of workplace offerings |
| Coding 1.1\Perceptions\Frustrations & Resentments\Confrontations |
| Coding 1.1\Perceptions\Frustrations & Resentments\Lack of contribution to the group |
| Coding 1.1\Perceptions\Frustrations & Resentments\Disrespectful behaviour by leaders |
| Coding 1.1\Perceptions\Frustrations & Resentments\Favouritism & politics |
| Coding 1.1\Perceptions\Frustrations & Resentments\Helplessness |
| Coding 1.1\Perceptions\Frustrations & Resentments\Helplessness\Felt distance inside the group |
| Coding 1.1\Perceptions\Frustrations & Resentments\Helplessness\Helpless towards the system or external forces |
| Coding 1.1\Perceptions\Frustrations & Resentments\Helplessness\Workers against management & leaders separation |
| Coding 1.1\Perceptions\Frustrations & Resentments\Inhumane working conditions |
| Coding 1.1\Perceptions\Frustrations & Resentments\Lack of autonomy |
| Coding 1.1\Perceptions\Frustrations & Resentments\Lack of camaraderie |
| Coding 1.1\Perceptions\Frustrations & Resentments\Lack of confidence in abilities of others |
| Coding 1.1\Perceptions\Frustrations & Resentments\Lack of confidence in employees by leaders |
| Coding 1.1\Perceptions\Frustrations & Resentments\Lack of enthusiasm & effort by others |
| Coding 1.1\Perceptions\Frustrations & Resentments\Lack of 'give & take' by the organisation |
| Coding 1.1\Perceptions\Frustrations & Resentments\Lack of information or communication |
| Coding 1.1\Perceptions\Frustrations & Resentments\Lack of involvement in decisions |
| Coding 1.1\Perceptions\Frustrations & Resentments\Lack of material preconditions |
| Coding 1.1\Perceptions\Frustrations & Resentments\Lack of material rewards |
| Coding 1.1\Perceptions\Frustrations & Resentments\Lack of personal fulfilment & advancement |
| Coding 1.1\Perceptions\Frustrations & Resentments\Lack of recognition |
| Coding 1.1\Perceptions\Frustrations & Resentments\Lack of stability and continuity |
| Coding 1.1\Perceptions\Frustrations & Resentments\Lack of structure |
| Coding 1.1\Perceptions\Frustrations & Resentments\Neglected work environment |
| Coding 1.1\Perceptions\Frustrations & Resentments\Not feeling part of organisation (Corporativismo) |
| Coding 1.1\Perceptions\Frustrations & Resentments\Other people reluctant to change |
| Coding 1.1\Perceptions\Frustrations & Resentments\Perceived lack of common goal |
| Coding 1.1\Perceptions\Frustrations & Resentments\Perceived lack of conviction of leaders |
| Coding 1.1\Perceptions\Frustrations & Resentments\Perceived unfairness & unequal treatment |
| Coding 1.1\Perceptions\Frustrations & Resentments\Stress & high workload |
| Coding 1.1\Perceptions\Trust\NOT trust |

19. Appendix I: Discussion of Validity of TST in Oral Form

Although the procedure of the TST is an established procedure, to my knowledge it was never applied in the oral form as part of an interview as it was done in this study. This section compares the results with outcomes of similar studies to establish the degree of (convergent) validity of the oral TST (cp. Section 7.1).

19.1 Self-Concepts as a Function of Demographic Information

The salience of different selves reflects an important facet of individual's cultural identity and personal cultural provenance. The results of TST represent internalised cultural values that reflect how individuals relate to their groups.

This subsection works to analyse the results from the TST as a function of different demographic characteristics such as age, gender, societal culture and job tenure.

Although the case studies were purposefully placed in contrasting societal contexts, the selection of staff can lead to bias because no society is culturally homogeneous. According to Triandis and Suh (2002), only around 60% of the members of an individualistic culture are highly individualistic while 60% in collective cultures will be highly collectivistic individuals¹.

Therefore this study did not merely rely on national borders as discriminating variable but probed the deeply internalised values of individuals using the TST. This raises the questions of how the results of the TST compare to previous research.

19.1.1 Across all participants

The salience of the personal self across all cases and interviews is roughly 67%, with a

¹ They use the term 'ideocentric' for individualism at the individual level, and 'allocentric' for collectivism at the individual level.

relational self of 20% and a lower proportion of the collective self (13%).

This is in line with Somech (2000) who states that “regardless of cultural background people gave typically more independent responses than interdependent responses” (p. 169)². More specifically, a study by Watkin, et al. (1998) reported an average of roughly in the 60-70% salience of the personal self³ across genders and the participating countries, which is well in accordance with the results obtained in this study.

19.1.2 Participant age

As Figure 23 shows, the salience of the personal self is stronger among younger employees, while with increasing age both relational self and collective self become more salient at the expense of the personal self⁴.

² The independent self refers to the personal self, whereas the interdependent self condenses the relational and collective selves.

³ They use the term „idiocentric“ self for the personal self

⁴ The statement of age is voluntary. For participants where no age was stated or could be concluded by the survey responses, it was estimated.

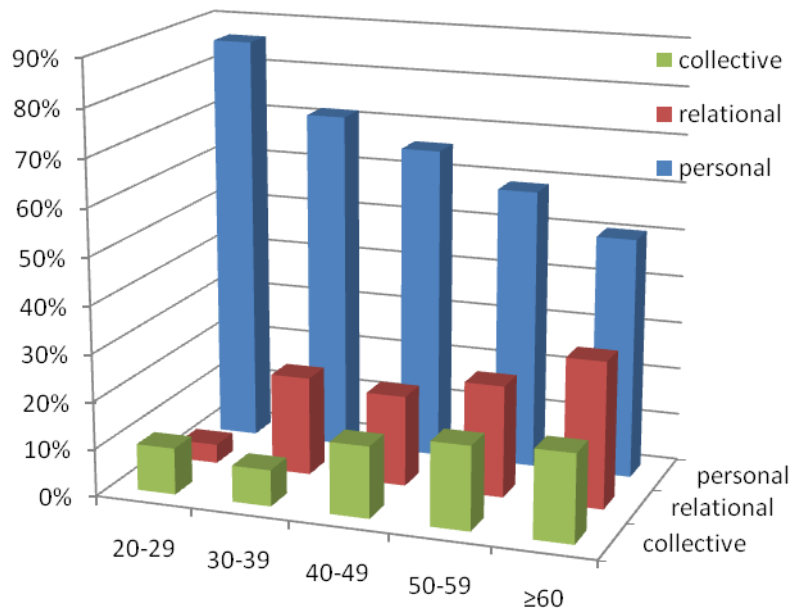


Figure 23: Arithmetic means of social selves divided in age groups (across all cases)

According to Gelfand and colleagues (2004) and Triandis (1995), younger individuals usually exhibit more individualistic characteristics, i.e. a more salient personal self – a pattern that also the TST results of this study show (see Figure 23).

19.1.3 Gender

In addition to the cultural traits of the society people have grown up in, gender may impact the self-concept. As Table 8 and Figure 24 show, on average the personal self is markedly higher at the expense of the relational self amongst female participants.

Table 8: Self-concept across all cases as a function of gender

| Location | Salience of self-concept | | | Total |
|----------|--------------------------|------------|------------|---------|
| | personal | relational | Collective | |
| Male | 61.79% | 24.75% | 13.45% | 100.00% |
| Female | 76.26% | 10.16% | 13.58% | 100.00% |

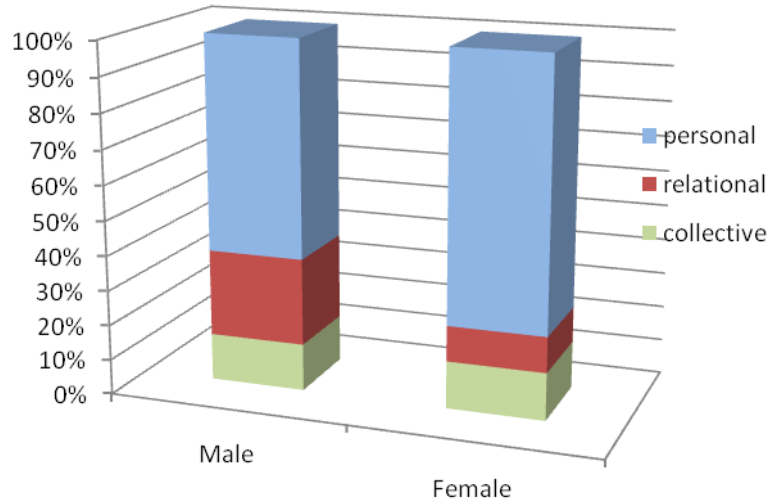


Figure 24: Self-concept across all cases as a function of gender

While the findings from past research indicate that gender has no significant impact on the self-concept in collectivist societies, it results in a lower salience of the personal self in individualistic societies (Watkins, Akande, et al., 1998).

The data from the present study, however, presents a different picture with the personal self being more salient amongst female participants (see Figure 24). Due to the low proportion and total number of female participants, however, these results should be treated with caution.

19.1.4 Societal affiliation

Triandis and Wasti (2008) write that in collectivistic cultures,

People... define themselves by their relationships with groups... In such cultures individuals define themselves more often by using social attributes (e.g., I am a member of this group, I am a cousin) than personal attributes (e.g., I am an extrovert, I like classical music). (p. 4)

The average salience of the personal self is markedly higher amongst the Spanish participants at the expense of mainly the collective self (see Figure 25), both before (

Table 9) and after (Table 10) the analytical adjustment described in Appendix G. As Table 9 shows, the average salience of the personal self averages about 64% among the NZ participants, while the same value is 74% in Spain. Thus, paradoxically, the salience of the personal self is lower in NZ, a societal culture known as highly individualistic.

Table 9: Arithmetic means of social selves divided by societal location (across all cases; before analytical adjustment to account for idiomatic disparity between participants)

| Location | Salience of self-concept | | | Total |
|-------------|--------------------------|------------|------------|---------|
| | personal | relational | collective | |
| New Zealand | 66,39% | 18,77% | 14,84% | 100,00% |
| Spain | 73,70% | 18,37% | 7,93% | 100,00% |

However, this is in line with findings of a comprehensive study of Watkins, et al. (1998) using the TST in nine different societal contexts, who also reported a markedly lower average of the personal self in the individualist countries of NZ, Australia, Canada and South Africa (white sample) when compared to collectivist countries of China, the Philippines, Turkey, Ethiopia and South Africa (black sample).

Table 10: Arithmetic means of social selves divided by societal location (across all cases; before analytical adjustment to account for idiomatic disparity between participants)

| Location | Salience of self-concept | | | Total |
|-------------|--------------------------|------------|------------|---------|
| | personal | relational | collective | |
| New Zealand | 63,69% | 20,35% | 15,95% | 100,00% |
| Spain | 73,70% | 18,37% | 7,93% | 100,00% |

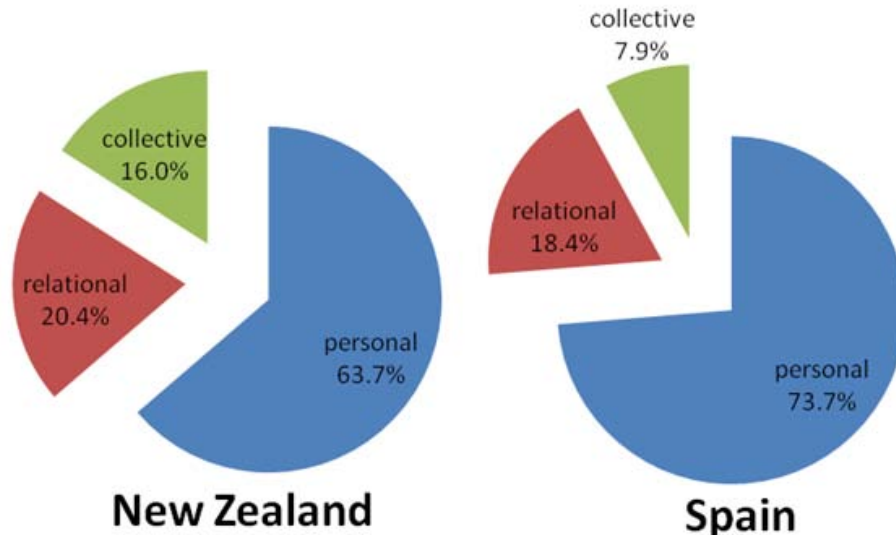


Figure 25: Arithmetic means of the salience of self-concepts in terms of societal location (across all cases; after analytical adjustment to account for idiomatic disparity between participants)

In this connection Somech (2000) explained that “the difference between cultures is expressed in the proportions of independent statements as compared with interdependent self” (p. 169)⁵.

According to the argument of Brewer and Chen (Brewer & Chen, 2007) the conceptual distinction between relational and collective selves is highly relevant for understanding the cultural differences between Spain and NZ. The contrasting positions of Spain and NZ on the two I-C dimensions reflect a vital difference in the nature of social relationships. Its likely consequences for the self-concept will be discussed in the following section.

⁵ The independent self refers to the personal self, whereas the interdependent self condenses the relational and collective selves (refer to Table 9).

19.2 Collectivism at the Group and Individual level

At the individual level, the I-C dimension of culture is closely related to a basic aspect of the self-concept (Markus & Kitayama, 1991). Although the relationship between the macro-level of societal culture and individual level of analysis is complex (Hofstede, 2002; Smith, Bond, & Kagitcibasi, 2006), it is clear that the self-concept and social identity are also culturally defined and regulated (Brewer & Yuki, 2007): societal culture impacts the self-concept of individuals (Erez & Earley, 1993). Whereas an individualist culture shapes the independent self who experiences a sense of self-worth by being unique and different from others (Markus & Kitayama, 1991), group-focused collectivist cultures nurture the interdependent self (Erez & Earley, 1993).

While the distinction between interdependent and independent self is highly relevant to conceptualise essential cultural differences, it alone is not sufficient to understand cultural variation in terms of group membership. Brewer and colleagues (Brewer & Chen, 2007; Brewer & Gardner, 1996) make an important addition and further discriminate between two kinds of interdependent selves: the *relational* self and the *collective* self and thus create a trichotomisation of the self. The relational self-construal refers to a personalised form of group relationship with strong interpersonal ties, while the collective self relates to a depersonalised form of group affiliation. Brewer and Chen (2007) explain that "it is primarily Western European and North American individualistic cultures that rely heavily on abstract, categorical group memberships" (p. 137).

Triandis, a prominent scholar of cross-cultural psychology who is renowned for his outstanding contributions to research on the I-C dimension of culture, writes approvingly:

When this distinction is made, many anomalous findings fall in place. For example, East Asians are relational collectivists, but Americans are both individualists and group collectivists. Thus in all cultures there are three social interactions:

individual, relational, and collective levels of the self. What differs among people across cultures is the salience and priority of these three cultures different selves. (Triandis & Wasti, 2008, p. 6)

The researchers of the GLOBE project (House, Hanges, Javidan, Dorfman, & Gupta, 2004) made a similar distinction between two different aspects of I-C which is reflected in two instead of one (as in the case of Hofstede’s (1980, 2001) framework) dimensions of cultural I-C: In-group and Institutional Collectivism (see Table 11). In-Group Collectivism reflects the cohesiveness of and pride in social groups such as the family or society, while Institutional Collectivism describes the extent to which “collective action and distribution of resources” is encouraged and rewarded within the society (Javidan, Dorfman, Luque, & House, 2006, p. 69). With this distinction made, a country can be (Institutional) collectivistic and (In-Group) individualistic at the same time. For instance, Sweden, a highly individualistic country in terms of GLOBE’s In-Group Collectivism and also in Hofstede’s (1980, 2001) framework, is a “collectivist country” in terms of GLOBE’s Institutional Collectivism (Javidan, et al., 2006, p. 69).

Table 11: Features of In-Group Collectivism and Institutional Collectivism

| In-Group Collectivism | Institutional Collectivism |
|--|---|
| “family integrity”, “loyalty toward others” (Gelfand, et al., 2004, p. 462). | “prioritize group over individual interests” (Gelfand, et al., 2004, p. 462); degree to which “collective distribution of resources and collective action” are rewarded (Javidan, et al., 2006, p. 69). |

Javidan et al. (2005) explain further that the

two different types of cultural collectivism, Institutional and In-Group Collectivism, are likely to have opposite effects on the source unit’s motivation to transfer

knowledge. Managers in a high In-group Collectivist culture are used to working closely with the members of the ingroup but are less concerned with knowledge transfer to those outside their own group. They are reluctant to spend the time and the effort to build close relationships with outsiders. In contrast, managers from a high Institutional Collectivist culture tend to promote and encourage more system-wide information systems and knowledge transfer to encourage greater organization wide communication and collaboration. (p. 66)

In this logic, societies that feature high Institutional Collectivism are likely to result in a relatively strong salience of the collective self, while high In-Group Collectivism implies the importance of direct personal relationships and can be expected to result in a preponderance of the relational self over the collective self.

As explained in the main title of the thesis, Spanish culture draws heavily on direct interpersonal relationships, in NZ interpersonal bonds are not as strong but a sense of collectivism within the society is strongly marked. Consistent with the above reasoning, the cultural difference between Spain and NZ is likely to be reflected in the salience of different types of the selves: A relatively strong salience of the collective self can be expected amongst participants in NZ, while the importance of direct personal relationships in Spain is likely to result in a dominance of the relational self over the collective self.

The results of this study are indeed in line with this reasoning: While in NZ the ratio between collective and relational self equals about 4:5, among group members of the Spanish cases this ratio is 4:9 – about half as much (see Figure 25). These findings are also consistent with Watkins, et al.'s (1998) study: The main difference in self-construal between participants from individualistic and collectivistic social backgrounds is the lower personal self and a higher proportion of the collective self in

relation to the relational self⁶ in case of participants from individualistic societies.

Moreover, virtually all meaning units that were coded as manifestations of the collective self amongst Spanish interviewees were in reality references to the support of a football club. Obviously it is debatable whether supporting a football club should be seen as an “affiliation to an impersonal group” or rather a “leisure activity” and thus a reference to the independent self. This does, however, not limit the validity of the findings – to the contrary: If the support of a football club had been coded as a “leisure activity,” the salience of the collective self amongst the Spanish participants would have been even less pronounced.

To summarise, although interviewees were selected to be representative of the work group and not the society it is located in, the observed differences seem to reflect societal level differences found in earlier studies. With the exception of gender influences, the results obtained through the TST are very consistent with previous research. While this has not direct impact on the outcomes of this study, the plausibility of the TST results suggests the adequacy of the data gathering and analytic procedures and strengthens the theoretical validity of the measures (Maxwell, 2002).

⁶ Watkins et al.’s (1998) use the analogical categories of idiocentric (~personal self), *small group* (~relational self) and *large group* affiliation (~ collective self).

20. Appendix J: Patterns in Individual Meanings

There are several interesting patterns across the data which require some additional explanations. This section complements the findings presented in Chapter 7.

20.1 Autonomy Versus Conformity

In both work groups located in NZ an interesting pattern emerged: While most group members insisted that the Toyota Way was applied in its “original form,” others put emphasis on their own contribution: “I do it my way, I don’t really do it Toyota’s Way”, which started a heated debate during one of the workshops at whose end the group member insisted that “it’s different”.

Other group members are cognisably uncomfortable with the idea of deviating from the Toyota Way and insist that all “the Toyota principles are there”. Interestingly, strong proponents of conformity with the Toyota Way tended to coincide with lower scores of the personal self (TST).

The following excerpt illustrates well the outspoken dislike of rule compliance by some group members:

They must have thought it was a better way [referring to a standardised procedure]. I mean ... I made exactly the same job ... but it wasn't the way they liked it. They like everything be done in a procedure. I always said back then it might have suited the Japs [i.e. Japanese] but it didn't suit us Kiwis, you know.... I couldn't stand that, you know. Quite honestly... I've always been taught.... Like I say, my dad was a farmer plus he used to work on his own gear, he used to repair his own machinery. When I had my own panel shop he made parts for gear, for my floor jacks. He was a real self-taught, pretty much.... My brother is the same. And it is very hard to be told that you do that then and then. So regimented, you know? Hard to work with.

20.2 Individuality Versus Social Integration

A similar difference in opinion emerged around the need for social integration. The following short dialogue from a workshop illustrates individual differences:

A: “Continuous improvement means also improving relationships to our workmates [reading out card], because if you’ve got a bad situation in your work, in your team...”

B: “That’s not my problem, it doesn’t bother me.... I’m still doing my job anyway, I don’t do hers as well, and that’s her problem...”

A: But if you’re part of a team, like if C is having a hissy fit [meaning a dispute] with you and you know ... she’s trying to do her bit and you are sort of...

B: Well, I just won’t help her and I’m going to get ahead then.

20.3 Use of a ‘Family’ Metaphor

There is another subtle pattern in the meanings: A number of people used the metaphor of a family to describe their workplace relations, such as “run like a family” or “it’s like a family working within the people around you [sic]”. Interestingly, these people had all emerged from the TST with a low personal but very high relational self. Conversely, people with a high personal self frequently related CI to self-actualisation motives such as career advancement and preferred a professional (as opposed to personal) relationship to their colleagues.

20.4 Sophistication of Individual Meanings

Another interesting difference is emerged not only on the individual level, but on the group level as well. The meanings that group members from MPB expressed had often a different quality when compared to the ones expressed in any of Toyota cases: While meanings at Toyota are frequently quite elaborate, group members at Multipueblo attached more basic, “sober,” or technical meanings to CI, such as “improve quality”.

Most notably, they hardly related CI to personal improvement or advancement, as it was done frequently in all Toyota cases. Moreover, meanings that MPB group members attributed to CI do not stretch beyond the workplace into the private life of individuals.

21. Appendix K: Salient Cultural Themes

This section elaborates on the cultural themes underlying CI as indentified in Section 7.4.2.3.

Table 12: Cultural themes (Part 1)

| Theme | Quotes from interviews and workshop to illustrate the theme |
|--|---|
| Opportunity for skill development and personal growth | [The Toyota Way] makes them [employees] feel that they are achieving what is set out for them to do. And if they have problems, then... It's not like you have a piece of paper and you've got step, step, step, step. The company here tend to work with people not directly at them, not to make them feel uncomfortable, but it's indirectly. You find that they do help you and its not just work, it's also personalities. When I first work here, there was no way that I could sit here and do this.... It's made me a stronger person; it's made me be able to speak. |
| Meaning of CI extends beyond work into private life | <p>If I look back now, I did use the steps [of the Toyota Way] throughout my life. What it's doing is it's making you go from your basics.... So you start off with like your problem and you shuffle through your problem. And you do it so you get to a point where you get the result that you want. So what you're virtually doing is breaking down into steps that you can handle - and I've done with problems with my life and other workplaces.... You plan, you action, you check and you do, and it's virtually what I've done, I've done through my life. It's just going in steps, and that's without even thinking that it is the Toyota Way. It is what I was taught when I was twenty. So, you know... and I've done that right through, without even... "OK, that's Toyota", because it's been drummed into me because it is over and over and over again and it's just automatic now. And that's... I don't know... I'd say there's quite a few people out here that still do that.</p> <p>For me ... the 5 pillars on which the Toyota Way is based, are a philosophy, ... not a philosophy so much about work, but about life.... Yes, for me it really is, I'm fully I mean identified with this philosophy as I say.... I sometimes give them to my son to read it, I mean to see ... what a job with responsibility is.</p> |
| Enhancement of personal image | I was probably a lot at the forefront of changing it from individual to team [-based evaluation], because I'm very helpful, I've helped people. I'd be helping whereas individuals would be more concerned about their own individual productivity, whereas I would be sort of more concerned about how could I help you, you know,...giving other people a hand, whereas other people weren't so much like that. Not to say that I needed help. |

Table 13: Cultural themes (Part 2)

| Theme | Quotes from interviews and workshop to illustrate the theme |
|--|---|
| Social integration/ interaction | <p>Yes, these were activities that were very good ... and we formed a team, we cleaned the machines, we painted them, we left them really well we went to eat, I mean, you socialised within the company.... There was a team with those people, when you were there, well you socialised with them.</p> |
| | <p>The Toyota philosophy and getting things Just-In-Time and everything worked like that. That was wonderful.... Everyone would talk to you. I've been in places where the bosses really wouldn't have a lot to do with you. But here, they knew everybody, they'd come up at the meetings and everyone there.</p> |
| | <p>We formed a team,... we went to eat, I mean, you socialised within the company.... Even if you're working within a company, but there was a team with those people, when you were there, well you socialised with them, ... there was a better atmosphere than there is now.</p> |
| | <p>They are just so... interested and supportive. And I personally believe that is a great asset for the company They are giving, they are caring, they're so everyday people...they don't just think about themselves.</p> |
| | <p>Well, continuous improvement, I believe that everyone should contribute with everything, everything we can think of to improve, both at human and work level, that is, in my team, to me, it is important that the people I have under my charge are comfortable working with me and working in the company.</p> |
| | <p>It's the people as a whole. It's like a team; it's like a family working within the people around you.</p> |
| Contributing to the good of the group and the company | <p>The team system here is the bonus system, which is down to what the whole team has pulled together.... That is a team effort. And it is a team effort all-round. What I do affects someone else, and it goes on down the track. If I don't do certain things, they can't do certain things, you know? And if I make improvements..., that helps them and that helps the company.</p> |
| Personal skill improvement | <p>You're improving every time. Every car is different, it's like every day is different. But you're continually improving your ability to refurbish that car.</p> |
| | <p>It's quite interesting. And I've learnt... I know that I can learn a lot more out there; I've learnt so much already, especially with the computer systems.</p> |
| Contribution to team success | <p>I've been here for many years, and, I don't know, we have achieved many things, and yes I feel good, comfortable and good... I am excited to see... the fruits.</p> |

Table 14: Cultural themes (Part 3)

| Theme | Quotes from interviews and workshop to illustrate the theme |
|--|--|
| Personal challenge/ drive from within | Since when we started... the management system was set up,...The new problems that you find, the new machinery, I don't know, I find it interesting, I find it exciting, I have been a part of all that. |
| | I constantly look at it all the time that I am, when I'm doing things "can I do this better?" Without thinking "we should be practising kaizen or the Toyota Way" I do just practise it anyway... It's self-satisfying to me. When I go home at nine, there's some things that maybe tend to pop back from time to time, I'd think about that and I'd wake up at night, even... "Maybe if we did this, and we did this - Nah, that's not going to work - Maybe we could do this, this and this - Nah, this is not going to work" |
| Autonomy for action of the work group | So out in the warehouse, myself and the rest of the team, we can shape it.... We have a vision of how things ought to be, we can work toward that vision and make things really happen. |
| | It's got better the longer I've been here. Especially about eleven years ago, when we had a change of management, and the team leaders had more control, say and the rest of the team on the floor, their say is more recognised. It's almost like they're working in their own business now. |
| | If we change an aisle around the other way, we don't have to ask permission from the manager, we just go sort it out. Might have a meeting group and discuss all the points connected, make a plan, and then just go about doing it. More plan and do, PDCA [Deming/Sheward cycle: Plan, Do, Check, Act], plan, do, action. |
| | You're contributing, get listened to, feeling like you are a partner in the business, and seeing it happen. |
| | I don't think there is anything that I feel like, "Ah, I'm going to leave". Because we have so much input in the place, so if it doesn't go right, we should work a little bit harder and make sure it goes right. |
| Career development opportunity | There has been a lot of team that started out in the warehouse and they've gone through other departments all throughout the company. They're good team members - start out at the bottom, on the floor, picking parts, getting their hands dirty. And they improve themselves and they've gone through to do other, really good jobs. |
| | If you perform and you stand out, there's a room for advancement within the company itself, fully, not just in the warehouse, where we are...And we have seen that people go out from the warehouse. Or go even on to bigger things. |
| | <i>Negative instance:</i> When a person is my boss and she does not advance, if my boss does not advance then those below her, they are obviously not going to make progress ... because you cannot skip the one above you. |

Table 15: Cultural themes (Part 4)

| Theme | Quotes from interviews and workshop to illustrate the theme |
|--|--|
| Improve work for oneself and others | Yeah, that's right, exactly. I think a lot of it is common sense. Trying to make my job easier, and make other people's job easy. |
| | Kaizen for me is finding ways of improving, you know, either improving or making things easier. |
| Work variety and social interaction | So I might be doing a small project here but something might happen so I have to go off that project. I enjoy that, I don't mind doing other things. Yeah I'm enjoying my job because I got a great variation in what I do and the people I work with. |
| Feeling of being able to make a difference as an individual | If you've got ideas that you feel you can improve something; they're always looking for improvement. They have a system down where you write it down and it goes forward to a committee. They look at it, go through it, and they decide whether... the improvement may be beneficial to the company. And then if you come up with an exceptionally good idea you get rewarded for it. The processes of its going through are always talked about at our weekly meetings like you saw, where you have the opportunity to speak up. |
| | Even around the packing benches, all the packing bench layers, they used to be a total shambles, the packing material just got stuck in everywhere and everything; we had no designated area for certain things. Now all the packing benches are all set up and each one is the same, and that was all my idea. I've come up with all these improvements |
| | I've worked for [name of another company]. There's no kaizen, there's no improvement. Yeah, there's nothing like that. The only people who come up with any changes are the bosses. And that's just implemented, it's not discussed, and that's usually something that has been tried before and found to have failed... |
| | Their [Toyota's] philosophy is, if you can improve something, we hear it... and do it straight away.... If you came up with an idea, they'd listen and then you can put it on paper and they'll discuss it. |
| | The best thing about it is that they listen to you. Continuous improvement is about to people's ideas. And that's why they do so well. |
| | I think the important thing is that it gets everybody involved in the work and how you work and instead of just coming to work and get told what to do, and then do that everyday. And then someone says "No, do it this way now!", you actually get some input in how you want to work and what the work looks. |
| | <i>Negative instance:</i> I am given a sheet to fill in, to say what I think, but I have been shown more than once that ... [it] does not help. |
| | <i>Negative instance:</i> Now the company decides, I don't know who in the company.... I have no idea. |

Table 16: Cultural themes (Part 5)

| Theme | Quotes from interviews and workshop to illustrate the theme |
|--|--|
| Perception of constant progress | And just the achievement that we achieve, day-by-day, week-by-week, year-by-year. Even in the time you've been coming you have seen things shift and move, it's just continuous. We probably never get the perfect set-up, but we will always be shifting, trying to improve. |
| Personal recognition for achievements | <p>And they actually [award] ...the best idea, they'd actually... award you with something, a petrol voucher or something for the best idea, that sort of thing. So you actually get a bit of recognition that way and, by them doing that, they actually implement it and do it.</p> <p>[About a previous employer]: There's not a lot of input from the staff.... Or there was...yeah, it was your boss getting the credit for it.</p> <p>Everybody is appreciated here as an individual, even if that's just saying "Hey thanks you did a good job, hey thanks very much". I think it's <i>really, really</i> important. Otherwise if there's no appreciation, people go 'why should I do extra work?'"</p> |
| Being kept informed | <p>I quite like getting here in the morning and checking up on the board, knowing what I'm going to be doing after lunch.... Yeah, I quite like coming here in the morning and knowing exactly what I'm going to be doing.</p> <p>We have the decisions not Sunday if someone starts on Monday who we don't know...more communication in the team.</p> |
| Pride in the group's achievements | This one [warehouse] is a little bit unique. In Japan, most things are done by hand, and off ladders.... I know the picking rate in this country is quite high... I know they [the Japanese headquarters] do use us as a bit of a showcase. |
| Having developed one's own approach, being distinct as a work group | <p>I think we put our Kiwi ingenuity, our way into it. You know, when there's a problem ... we use our Kiwi ingenuity. The expertise in the warehouse, to look at it, we can't go to a Japanese Toyota Way book and find the answer. That's where we developed our way.</p> <p>Of course, the Japanese are very regimental in what they do, and in New Zealand, for instance... they might do free thinking. More free thinking than Japan and sometimes, you know, because we like that, we get our backs up a bit maybe, and stand up and say what we mean, whereas the Japanese culture is they respect the others.</p> |

Table 17: Cultural themes (Part 6)

| Theme | Quotes from interviews and workshop to illustrate the theme |
|---|---|
| Material and relational stability | Why I stay? I think I like stability and my wife likes stability and my family likes stability. |
| | I think it's... stability, there's the security and that we do what we do well and we keep doing that. |
| | But is not the same to be in a company like this is now ... where there is work as to be in a company where you do not know if tomorrow you're going to be. |
| | If ... you're not sure that you are going to be continuously employed for the whole year, then you are not motivated, to think about long-term improvements. |
| | [CI] gives you stability because when you are out of home, you know you've got a stable company and, I don't know, your mind is peaceful ... You know... that there's a peacefulness, that here there's future; I mean I can have a family. |
| | I love being here because it's a set pace, five days a week, that's all. |
| | <i>Negative instance:</i> There's a total lack of control, it's not properly organised.... If it is not organised from the top, you can't ask for the same thing down here. |
| Achievable workload/ no overburden | <i>Negative instance:</i> You can't without human resources, you can't ask ... people to work twice as hard ... and ask them to have a maintenance and a cleanliness or tidiness at the machine.... It's impossible because of that, |
| | I can plan my day around my work load and then...with the acquired time ... do different projects. |
| Being respected as an individual | <i>Negative instance:</i> Everyone yells at you, everyone sends you away; no one listens to you.... That is not having any respect for somebody. |
| | They are just so... interested and supportive.... They are giving, they are caring, they're so everyday people. |

22. Appendix L: Link Between the Subjective and Objective Perspective on Culture

This section examines the relationship between the subjective and objective perspective on culture and thus elaborates on the discussion of the ontological and assumptions of the present study in Sections 4.2 and 4.3.

To be sure, the group's culture could alternatively be portrayed as something "out there" (i.e. in objectivist terms; i.e. the implicit ontological assumption that underlies the use of cultural key informants in functionalist studies). A group's culture as a shared meaning system implies common cognitions among its members that characterise the group as a whole. It becomes part of perceived "factual world" of each group member through the relative stability and predictability of patterns of behaviour that are the result of a high degree of commonality in cognitions amongst the group members.

Miles and Huberman (1994), for instance explained:

Human meanings and intentions are worked out within the frameworks of... social structures - structures that are invisible but nonetheless real. In other words, social phenomena, such as language, decisions, conflicts, and hierarchies, exist objectively in the world and exert strong influences over human activities because people construe them in common ways. Things that are believed become real and can be inquired into. (p. 4)

This perspective however, obstructs rather than illuminates the process through which culture is constructed. In this connection Sackmann (2001) argued that "social reality is not objectively given; instead, social reality is actively constructed and reconstructed by people acting and interacting in social settings" (p. 152).

Illuminating about the connection between the subjective and objective, Gioia and Pitre (1990) wrote¹:

True to their assumptions, interpretive theorists assume that human agency is central to the construction of rules for structuring activities. Yet, given an awareness of structurationist considerations and the functionalist perspective, they can recognize that organization members treat the result of their ongoing structuring process as an external, objective reality. Similarly from the meta-level, functionalists can treat the emerged structure in a comparable fashion as an historical artefact of structuring processes, emphasizing the reification of the emerged structure as a given, to be studied objectively. Thus, users of both perspectives can recognize the benefits deriving from the alternative view, without violating their own tenets. Meshing the functional notion of structure with the interpretive conception of structuring produces a more nearly complete picture of the phenomena. (Gioia & Pitre, 1990, p. 596)

Calás and Smircich (1987) explained further:

Traditionally, explanation and understanding are framed as opposite ways of knowing and pursuing inquiry. Explanation, as evident in positivist science, follows the model of the natural or physical world in which hypothesis testing, experimentation, verification or falsification, and generalizations are expected. Understanding, in contrast, relies on interpretations of subjective meanings; thus generalizations are not required or expected. Explanations takes the view of the world from the outside, while understanding takes the view of the world from the inside. (p. 232)

Sackmann (2001) added that:

¹ What Gioia and Pitre call “functionalist” refers here to the realist ontological assumptions of the functionalist paradigm, not the functionalist perspective as a whole.

Verstehen² means to gain a basic understanding of a given setting from the perspective of insiders. This approach has received increasing attention in the social sciences as a reaction to the shortcomings of positivism and the scientific method where a set of hypotheses is deduced from existing theories and investigated using the appropriate methods within the natural science tradition. (p. 152)

Similarly, Erez and Earley (1993) wrote, “in essence, interpretive research centers on understanding the dynamics of a corporate setting through the subjective perceptions of the viewer” (p. 68) and further elucidated in line with Calás and Smircich’s explanation,

The differing roles of the researchers in the cognitive versus interpretive approaches to understand cultural systems is striking. Whereas the cognitive researcher actively devises systematic examinations of cognitive process using a strong positivist approach, the interpretivist argues that the positivist approach is doomed to failure since it neglects the sociodynamics inherent in the complex nature of relationships. By definition the interpretivist is an active observer and interpreter of cultural phenomena rather than a scientist who presumes to impose causal structure on dynamic and embedded social systems. Perhaps it is best to view these approaches as complementary rather than competing. (Erez & Earley, 1993, p. 66)

While there seems to be agreement that the subjectivist and objectivist perspectives on culture were traditionally framed as theoretical opposites, their disparity does not appear to be irreconcilable or even practical (Mackenzie Davey & Symon, 2001). This links back to Section 4.3.4, which discussed the possibility of reconciling differences between scientific paradigms to combine insights.

² ‘Verstehen’ is German and translates loosely to ‘understand’ and is a common term in the German (Weberian) sociological tradition.

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