PERFORMANCE MANAGEMENT IN SCIENTIFIC AND

CULTURAL ORGANISATIONS: FROM AN

INSTITUTIONAL PERSPECTIVE

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DECLARATION

This is to certify that the work contained within has been composed by me and is entirely my own work. No part of this thesis has been submitted for any other degree or professional qualification.

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ABSTRACT

This thesis deepens our understanding of the institutional and organisational changes, which are taking place in the scientific and cultural public sector organisations, regarding their efforts to adopt performance management practices in the broader climate of increasing external demands of accountability and transparency. Using institutional theory as the main theoretical lens and an inductive approach, data is collected and analysed from an in-depth case study spanning four years in one scientific and cultural organisation and from a survey of the field such organisations are embedded in. At the field level, scientific and cultural organisations are embedded in multiple institutional logics (e.g. professional, governance/performance, managerial). Findings reveal the micro processes and dynamics of management accounting and institutional changes and how the power shift both results from and propel such changes.

Apart from the emphasis on institutional multiplicity as key to understanding the change process, attention is paid to how institutional entrepreneurs use visual framing with accounting inscriptions to promote changes, how emotional factors and the role of specialist work groups contribute to institutional change. Thus, the thesis, as a whole, provides practical insights into this special type of organisations and their performance management practices. Theoretical contributions are made towards the micro foundations of institutional theory and interpretive accounting research with visual and emotional elements. Implications for practitioner and policymaking are also explored.

LAY SUMMARY

This thesis examines institutional and management accounting changes in the field of scientific and cultural organisations in the Scottish public sector using both in depth case study as well as field survey to obtain a comprehensive and multi-level view of the causes, processes, dynamics and consequences of such changes. This study deepens our understanding of reasons behind public sector professionals' resistance. Some factors are found to be significant, such as nature of organisations (the institutional field they are in), the conflicts between different values and belief systems (institutional logics), power of visual framing by institutional entrepreneurs and emotional processes in contributing to (the lack of) changes. This thesis thus makes contributions to institutional theory, public sector management practices and policy-making.

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CHAPTER 1. INTRODUCTION

This chapter sets out the background, the nature and scope of the empirical investigation developed in the rest of the thesis. First section provides the background of the study; this is followed by a description of the research questions; the final section outlines the structure of the thesis.

1.1 Background of the Study

For Weber, the peculiarity of modern cultural derives largely from its calculability (Weber 1968). Countless measures and rankings permeate most aspects of modern life and incommensurable qualities are reduced and represented by measures and numbers. For example, hotels and restaurants can be reviewed and ranked, by professionals (Karpik 2010) or lay people (Jeacle & Carter 2011). Law schools which are diverse in many ways can be put on one list (Espeland & Sauder 2007). Even cities can be put on a scale and made to compete (Kornberger & Carter 2010). To achieve this, diverse and unique entities are grouped together and put into comparison (Karpik 2010). Although controversial and consequential (Espeland & Sauder 2007), these measures are often argued to facilitate decision making (Blank 2007; Karpik 2010).This trend has become so pervasive that scholars have coined the expressions such as 'audit explosion' in an 'audit society' (Power 1994; Power 1997) , 'a tsunami of accountability and transparency' (Caron & Gely 2004, p1553) and 'the tyranny of transparency' (Strathern 2000).

Public sector is no exception to this sweeping trend. Recent years have seen an increasing demand for accountability and transparency in public domain (Humphrey et al. 1993; Hood 1991; Hood 1995). Public organisations in most

developed countries have been subjected to calls for greater efficiency and effectiveness, for clearly defined lines of accountability (Dooren et al. 2010; Pollitt & Bouckaert 2011; Bouckaert & Halligan 2008).

Accompanying this trend is the increasing use of accounting and calculative practices such as performance management and strategic planning to discharge accountability and provide transparency in fields as diverse as schools (Ezzamel et al. 2012), museums (Oakes et al. 1998), healthcare(Scott et al. 2000), charity (Hwang & Powell 2009), higher education (Sauder & Espeland 2009).

This trend has also been facilitated with a sharp increase in the supply of managerial professional equipped with such managerial expertise to put such calculative practices to work (Abbott 2005). With the rise of managerial professionals whose expertise have become standardised such as the accountants (Suddaby & Greenwood 2001), there has been an apparent decline in the influence of traditional professions such as law, medicine and divinity (Hwang & Powell 2009).

Performance management has long been attractive to governments and public sector regulatory bodies, especially with the New Public Management reforms around the world (Hood 1991; Hood 1995; Lapsley 2008). To proponents of such reforms, performance management provides a solution to improve efficiency and effectiveness in bureaucratic organisations (Dent 1991), especially with the management of resources to improve service delivery (Pollitt & Bouckaert 2011). Therefore, NPM also has a role in pushing the already pervasive use of calculative practices further into the public sector domain (Halachmi & Bouckaert 1996; Modell 2001).

With the macro social change and NPM as backdrop, this thesis explores the nuanced micro dynamics of such change processes caused by the increasing demand of accountability and transparency where traditional professionals

(e.g. scientists and artists) are confronted with new managerial techniques and managerial professionals (e.g. accountants) in scientific and cultural organisations such as museums, libraries, and botanic gardens, etc..

Scientific and cultural organisations are interesting institutional settings because of their complexity. First, scientific and cultural organisations such as the museum, the galleries and the botanic gardens, are publicly funded which makes them part of the public sector domain where the external environment is complex with multiple stakeholders and multiple and sometimes conflicting demands (Modell 2001; Goddard 2010; Lapsley & Skærbæk 2012). Second, these organisations often serve multiple social objectives, such as education, research and visitor attraction, etc... These different objectives are often carried out by different professionals with different background and hold different professional values. This can result in internal complexity for these organisations. Such organisations are labelled 'hybrid' in the institutional literature where multiple values, belief systems co-exist both externally and internally (Delmestri 2006; Jay 2012; Pache & Santos 2012; Battilana & Lee 2014). Such complexity requires a well-developed theoretical framework which is able to inform cross-level empirical investigation. As a result, the recent development of neo-institutional sociology - the institutional logics perspective – is chosen as the main theoretical lens for this thesis.

Institutional theory has been widely adopted in social sciences in analysing social and institutional changes and its causes and consequences (Lounsbury 2008). Interpretive management accounting research has also been influenced by institutional theory (Lukka 2007; Scapens 1994; Brignall & Modell 2000; Burns & Scapens 2000; Lounsbury 2008; Carruthers 1995; Hopper & Major 2007; Major & Hopper 2005; Cooper & Hopper 2006). By adopting an institutional perspective, the thesis looks beyond the technicality

of the managerial techniques and seeks to examine the social and institutional factors, which shape the dynamics and processes of changes.

Institutional theory provides a cross-level framework addressing both the macro and the micro as well as the dynamics between the macro and the micro, although so far cross-level research remains rare (Smets et al. 2012).

In accordance with institutional perspective, individuals (both managerial professionals and traditional professionals) are conceptualised as reflexive beings that continually interpret and evaluate situations in order to adjust their actions and reactions and at the same time, bounded by their institutional embeddedness. The agency of individuals make it possible to interpret and react to measurement in diverse and evolving ways (Espeland & Sauder 2007).Therefore, framing complex change processes in the institutional theoretical framework allows the researcher to tease out the micro dynamics and to link the macro institutional environment with micro reactivity.

Institutional studies are often either focusing on macro-level changes (such as Dunn & Jones 2010, regarding medical education) or on micro-level dynamics (such as McPherson & Sauder 2013, regarding drug court micro processes). This study has a unique opportunity to add to cross-level institutional research. By surveying the field of scientific and cultural organisations regarding their use of managerial techniques to complement an in-depth case study spanning four years with multiple data sources, this thesis seeks to explore how the macro level institutional complexity influence the micro level use of managerial techniques such as accounting; and how accounting can be used to invade other traditional professional spaces and how different consequences of such changes can be explained.

The rest of the chapter states the research questions and outlines the structure of this thesis.

1.2 Research Questions

To analyse such a complex setting of scientific and cultural organisations, the first step is to get an overview of the macro institutional context on the field level. The institutional field these organisations are embedded in is complex and is characterised by multiple institutional logics and often referred to as 'hybrid' in organisation studies (Greenwood et al. 2011; Besharov & Smith 2014; Julie Battilana & Dorado 2010; Battilana & Lee 2014). This concept is different from that used in some accounting studies examining the changing role of professional (Miller et al. 2008; Kurunmaki & Miller 2006). The hybrid organisations reside in a field with institutional complexity (Greenwood et al. 2011) and multiple distinct value and belief systems (institutional logics) 'run through' these organisations which create conflicting demands and organisations are sometimes prescribed different courses of action by these institutional logics (Thornton et al. 2012; Thornton & Ocasio 2008b; Thornton 2004). Institutional theory and its key concepts are reviewed in chapter three.

In order to investigate the institutional context an organisation is in, the natural first step in institutional analysis is to identify the prevailing institutional logics and their relationship with managerial techniques in use. Borrowing from Bourdieu's concept of field and his study on the field of restricted cultural production (Bourdieu 1993), scientific and cultural organisations are treated as collectives of different professional groups rather than a homogeneous whole. Each professional group carry different institutional logics composition and this complicated the adoption of managerial techniques such as performance measurement and management.

Research Question 1: what are the prevailing institutional logics in the field of scientific and cultural organisation? What are the relationship, if any, between such institutional context and managerial techniques in use?

Chapter five address this research question.

After teasing out the institutional complexity on the field level, it is possible to proceed, taking a longitudinal and a micro perspective of one scientific and cultural organisation regarding its management accounting change, to investigate how institutional and accounting change unfold. Chapter six provides the details of the new management accounting system adopted in the case organisation.

Research Question 2: How does institutional change process unfold and what is the role of accounting in this process? What is the relationship between institutional logics and accounting?

By identifying how such institutional complexity manifests in the case organisation, micro dynamics of accounting and institutional changes can be teased out. Power relationship between professional groups embedded in different institutional logics can be explored during the intervention of accounting techniques. Chapter seven discusses the relationship between institutional logics and accounting change.

Visual elements are under-theorised in accounting and organisation research (Quattrone 2009; Busco & Quattrone 2015; Meyer et al. 2013). A new research question emerged from the inductive data collection in the in-depth case study.

Research Question 3: What is the role of visual elements in institutional change? And how can visual elements be put to work?

Chapter eight discusses the role of visual elements in institutional change and how visual framing can be used by institutional entrepreneurs to promote institutional change.

Emotions are an overlooked aspect of accounting and institutional research (Croft et al. 2014; Voronov & Vince 2012; Creed et al. 2014). During the investigation of performance measurement practices in scientific and cultural

organisations, a special phenomenon came to attention. The emotions of frustration and unconscious reactions to changes in traditional professionals' work life facilitate institutional change. And this somehow works to managerial professionals' advantage in promoting change. Also, the important role of emotion in the process of institutional changes contradicts the previous conception of change as a result of conscious processes. Therefore, another research theme emerged during the empirical investigation.

Research Question 4: What roles do emotions and managerial professionals (special work groups) play in the process of institutional/organisational change?

Chapter nine explores the role of emotions in institutional change as well as the impact of managerial professionals on the scientific and cultural organisations.

1.3 Structure of the Thesis

This rest of the thesis is structured as follows: chapter two reviews the literature on the trend of increasing demand for accountability and transparency in modern society, specifically, the new public management (NPM) movement in the UK and the central role of accounting in NPM. This serves as the backdrop for the empirical study of institutional changes in scientific and cultural organisations. This section is followed by a review of interpretative accounting research, which informs this thesis theoretically. In the interpretative paradigm, institutional theory, especially the latest development of Neo-Institutional Sociology (NIS) – the institutional logics perspective (ILP) is chosen as the major theoretical lens for this thesis. Chapter three provides a detailed review of the development of NIS and the three recent branches of theoretical development. Chapter three concludes by

providing the overview of the theoretical framework of the thesis, which incorporates Bourdieu's concept of 'field' and group psychoanalysis to enrich the macro dynamics and micro foundations of the institutional perspective. Chapter four discusses the research methodology of the thesis and is followed by five empirical chapters, which present the research findings.

Chapter five reports the findings of the use of performance measures in the field of scientific and cultural organisations and the causes of unintended consequences - the neglected characteristics of the mixed fields of 'restricted cultural production' and 'large-scale production' (Bourdieu 1993). Chapter six to eight present the findings of the in-depth case study of the accounting and institutional changes in the Royal Botanic Garden Edinburgh. Chapter six outlines the technical aspects of the management accounting system implemented in the broader climate of public sector reform. Chapter seven discusses the relationship between institutional complexities and accounting, especially how different institutional logics prescribe different interpretations and reactions to the same management accounting change. Chapter eight discusses the important role of visual framing as part of the repertoire of institutional entrepreneur, which enables and propels change. Chapter nine uncovers the important role of emotional processes at a group level and their impact on institutional change. It is found that emotional factors contribute to individuals' investment and divestment in group loyalty and certain institutional order.

Chapter ten concludes the thesis and discusses the theoretical and practical contributions.

CHAPTER 2. LITERATURE REVIEW

This chapter reviews the new public management (NPM) movement and the central role of accounting in the movement. NPM proponents often espouse an instrumental view of public sector reforms. However, in order to study consequences, this thesis turns to alternative theoretical perspectives. This chapter then moves onto reviewing of interpretive management accounting research, especially critical and institutional perspectives, which inform this thesis.

2.1 New Public Management and Accounting

New Public Management (NPM) is an umbrella term coined first by Hood (1991) which refers to the import of private sector values and managerial techniques into public sector setting. It is often intended to transform governmental administration into more efficient and effective business-like units which suggests a preference to capital market that is managerial, customer and performance oriented (Hood 1991; Pollitt 1990).

Hood (1991) sets out seven key doctrinal components of NPM: (1) 'hands-on professional management' in the public sector which requires clear assignment of responsibility; (2) explicit standards and measures of performance which requires clear statement of goals and objectives; (3) greater emphasis on output controls which stresses results rather than procedures; (4) shift to disaggregation of units in the public sector which requires the creation of 'manageable' units; (5) shift to greater competition in public sector; (6) stress on private sector styles of management practice which requires the import of private sector management tools; (7) stress on

greater discipline and parsimony in resource use which emphasis on cutting costs (Hood 1991; p4-5). These components differentiate NPM from the old-style public administration which champions the distinctiveness of the public sector and the delivery of public services (Dunleavy & Hood 1994).

NPM has proven to be a persistent and durable agenda (Dunleavy & Hood 1994; Lapsley 2009) and it is claimed that the UK has been at the forefront of the movement (Lapsley 2000). In the UK, public sector organisations have been increasingly subjected to managerial practices especially accounting changes such as value for money audits, performance measurement, computerised financial information system, budgeting, performance management, strategic planning (Pollitt & Bouckaert 2011; Bouckaert & Halligan 2008; Lapsley & Pallot 2000; Humphrey et al. 1993; Broadbent & Guthrie 1992; Burchell et al. 1985; Miller 2001; Rose & Miller 1992; Miller 1991).

NPM is a multi-dimension phenomenon, often with consequences unintended by policymakers (Brunsson & Olsen 1993). Proponents of NPM often advocate an instrumental view of managerial techniques, such as accounting with the potential to improve organisation decision-making and performance. Boston et al. (1996) argue that proponents of public sector reforms reply on three main economic theories which assume human behaviour as being dominated by self-interest (Boston, et al, 1996, p.17): public choice theory, agency theory and transaction cost economics. Public choice theory suggests that all services can be contestable and reducing the role of government can enhance transparency. Agency theory recognises the conflict between principal and agent, which promotes contractual relationship as a solution to the information asymmetry problem. The third theory – transaction cost economics – is concerned with how rational agents select governance structures which minimise transaction costs. All these theories place rationality at the core, which justify the intentions to

implement the reforms. However, intentions of the proponents often end in 'cruel disappointment' (Lapsley 2009). To investigate why some intentions end up in disappointments require alternative theoretical perspectives (Lapsley & Pallot 2000).

Within the movement of NPM, accounting has taken a significant role in 'modernising' the public sector (Humphrey et al. 1993; Guthrie et al. 1999). As Olson et al. (1998, p.18) argue that 'an increasingly notable element of the New Public Management movement is the seemingly endless list of accounting-based techniques that are being drawn on in the pursuit of reform.'

In Britain, under the influence of 'Thatcherism' and 'neo-liberalism', changes favoured reducing the size of public sector and economic rationalism rather than organisations and bureaucracies (Rose & Miller 1992). New public financial management (NPFM) is regarded as being the core of NPM (Olson et al. 2001). Under NPFM, governmental units transform their accounting to accrual base and are increasingly treated as profit centres (Lapsley & Wright 2004) and started to employ more management accounting techniques, such as performance measurement and performance management (Ittner et al. 1998; Cavalluzzo & Ittner 2004).

In the early 1990s, the mainstream public sector accounting research focuses on the technical core and ignores the social and cultural context completely which has led to the lack of variety in the theoretical approaches taken (Hopper & Powell 1985). In a later review paper published in 2008, this situation has significantly improved. 'Contextual' public sector accounting research now is regarded to have its own strong tradition (Broadbent & Guthrie 2008).

With this enrichment from various perspectives, the domains of accounting and accounting research have expanded significantly (Miller & Hopwood

1994). Rather than being viewed from a functionalist perspective, as merely technical practices, accounting is viewed from a much broader perspective as involving social, institutional and organisational practices. From this broader perspective, accounting research has focused on the role of accounting in the context of organisation, institution and society (Chapman, Cooper, & Miller, 2009a). There has been a stream of interpretive research aiming at unpacking the organisational, institutional and social aspects of accounting practices (Chapman, Cooper, & Miller, 2009b).

The rest of the chapter reviews the development of interpretive management accounting research, especially conceptualising accounting as organisational and institutional practice which informs this thesis.

2.2 Interpretive Management Accounting Research

The interpretive management accounting research perspective emerged in the 1970s to challenge the dominant functionalist research orthodoxy. Opposing the positivist and structural-functionalist research paradigm which operates on a hypothetico-deductivist (Chua 1986) basis, these early accounting research studies expressed their concerns about 'fragmentation' (Hopwood 1976) which is typical of hypothetico-deductivism. Instead, accounting research should emphasise the importance of studying accounting with an integrated understanding of accounting in its environment.

Initially, this stream of thought and alike was considered 'radical' when mainstream accounting was grounded in a positivist paradigm and contributed to the limitation of the range of questions being researched in the accounting discipline (Chua 1986). The limitation of the mainstream world-view inspired a group of studies in the 1980s which aimed at broadening the

accounting research horizon and providing fresh insights to the study of accounting theory and practices.

Cooper (1983) advocated that in order to break out of the then dominant functionalist research paradigm, accounting researchers should look into the messiness, dysfunctions in the practices of accounting to understand power and changes. Around the same time, Hopper and Powell (1985) provided a way of categorising the multi-disciplinary management accounting research. They borrowed the paradigm from Burrell and Morgan (1979) and divided the research into functionalist, interpretive, radical, given different assumptions about society and the social sciences, ontology and epistemology, human nature, methodology and axiology. In order to make the assumptions underlying social research explicit, Burrell and Morgan (1979) introduced sociological paradigms in organisational analysis. They found that most theorists take a stand on the ontology and epistemology in their research and the very nature of 'the social' itself. Instead of working in isolation, they argue that these rivalries in perspectives should be taken into account. Therefore, they put these different philosophical stances into four paradigms organised by two dimensions (Burrell & Morgan 1979). They define a paradigm as 'commonality of perspective which binds the work of a group of theorists together' (Burrell and Morgan, 1979; p. 23). The two dimensions are the 'subjective-objective' dimension and the 'regulation – radical change' dimension (which base on the assumption of order and conflict in society). The four paradigms are, on the subjective side, the 'radical humanist' (subjective/radical change), the 'interpretive' (subjective/regulation); on the objective side, 'radical structuralist'

(objective/radical change) and the 'functionalist' (objective/regulation). (See

THE SOCIOLOGY OF RADICAL CHANGE

'Radical humanist'

'Radical structuralist'

SUBJECTIVE

OBJECTIVE

'Interpretive'

'Functionalist'

THE SOCIOLOGY OF REGULATION
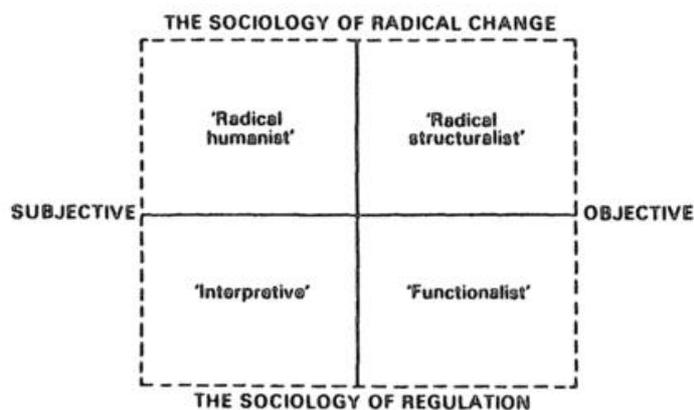
figure 1 below)

Figure 1 Four Paradigms for the Analysis of Social Theory; Burrell and Morgan (1979, p. 22)

Other paradigms exist as well, for example, Chua (1986) prefers three paradigms: positivistic, interpretive and critical. This scheme is also very influential in accounting studies.

Opposing the positivistic research assumptions, interpretive and critical accounting research aim to reject the search for causal explanations of social phenomena. Instead, it aims at providing 'thick' description of every slice of human situation (Chua 1988).

This strand of research inspired an important polyphonic debate in 2005 among a group of scholars (younger researchers then) (Baxter et al. 2008; Ahrens et al. 2008). This group includes Thomas Ahrens, Albrecht Becker, John Burns, Christopher Chapman, Markus Granlund, Michael Habersam, Allan Hansen, Rihab Khalifa, Teemu Malmi, Andrea Mennicken, Anette Mikes, Fabrizio Panozzo, Martin Piber, Paolo Quattrone and Tobias Scheytt. Afterwards, each participant was given one week to write 300 words in a rolling document in the alphabetical order of the contributors. This document was published in *Critical Perspective on Accounting 19 (2008) 840-866*. The main purpose of this debate is to establish a more positive identity

for the research domain and integrate the research achievement thus far. Interpretive accounting research has suffered marginalisation and was labelled 'non-mainstream' or 'alternative'. This lack of an independent intellectual identity has gradually changed over time with its well-developed methodological discourse, theoretical richness and wealth of empirical data (Parker 2012; Richardson 2012).

Parker (2012) looked back on more than four decades of published accounting literature and evaluated the deliverables and relevance of this discipline. *'Our tradition pursues issues of meaning and interpretation in the social world. We seek a holistic understanding and critique of lived experience, social settings and behaviours, through researchers' engagement with the everyday. Management accounting's interaction with its institutional, organisational, economic, social, political and technological contexts move to the centre stage. Rich, contextualised understandings and critiques of management and accounting processes and structures are what we are about.'* (Parker, 2012; p. 55) This research domain focuses more on the micro-organisational events, activities and changes in comparison with the quantitative positivist domain. A unique characteristic of qualitative accounting research is its engagement with actors in the fields rather than from a distance (Vaivio 2008). This offers an opportunity to gain a deeper understanding and interpretation of the situations (Ahrens et al. 2008). This approach requires researchers to rediscover 'what we thought we already knew' (Parker 2003) from the messiness, unpredictability and complexity in the research process (Modell & Humphrey 2008). Hopper, Otley, and Scapens (2001) observe that since the 1980s, an expanding array of theoretical approaches have been brought in to enrich accounting research, from labour process theory to Foucauldian, neo-institutional, political economy and more.

In Baxter and Chua (2003), on celebrating the 25 years of *Accounting, Organizations and Society*, the authors note that 'accounting is a discipline of

the social and it seemed important to us to understand it in the context of a broader set of discourses from the social sciences.' (Baxter and Chua, 2003; p. 98) The authors highlighted seven different research approaches under the label of 'alternative management accounting research': a non-rational design school; naturalistic research; the radical alternative; institutional theory; structuration theory; a Foucauldian approach and a Latourian approach. Over the course of almost three decades, management accounting research has truly become a research domain with multiple and rich theoretical underpinnings. Among these different approaches, several are employed to enrich the theoretical perspective of this thesis.

Foucault's governmentality literature, along with the various initiatives and trends across the world, has inspired accounting research to look at calculative practices represented by accounting and how they have claimed dominance beyond previous understanding. Taking a historical perspective, standard costing and budgeting have contributed to making individuals more governable and manageable, making accounting practice one prominent social force and apparatus of power (Miller & O'Leary 1987). In another historical study, Miller (1990) examines the relationship between accounting and the state, arguing that accounting as a technology, translates the political aspiration of the state into materialised and visualised tools, making accounting and governmental objectives congruent. As various 'counting' activities, rituals of verification such as auditing and performance measurement, become more and more prevalent in society, the force of accounting, its inherent reductionism and its power of portraying objectivity is also investigated(Power 2004; Power 1997; Power 1994).

Studies, which conceptualise accounting as organisational and institutional practices, have become common over the last few decades. Based substantially on chronological development, this chapter will first briefly review the evolution of research, which extends accounting beyond its

technical borders and situates accounting research as a part of the social sciences. Special attention is paid to institutional theory because institutional theory is the dominant theoretical lens in organisation studies (Lawrence & Suddaby 2006; Greenwood et al. 2008) and it is a key theoretical lens to study the interrelationship between accounting, organisations and institutions. Major theoretical developments in institutional theory are achieved mainly through organisational research.

2.3 Accounting as Organisational and Institutional Practice

Organisational institutionalism, also known as new institutional sociology has been significantly influential. This branch of theorising has become mainstream in organisational studies over the past 4 decades. In contrast to the instrumental view of organisational life, institutional theorists advocate a socially constructed view of organisations. Contrary to theories that neglect the environments and individual behaviours and preferences, institutional theory situates actors back into their surroundings and take into account the behaviour beyond instrumental calculations (Meyer & Rowan 1977; DiMaggio & Powell 1983). It is a powerful tool in possibly overcoming Thompson's assertion that it is difficult for organisation theorists to think simultaneously about rationality and indeterminacy (Thompson 1967). Instead of assuming organisations as economic actors, institutional perspective provides a more realistic treatment of organisations. It was brought into organisation studies as 'a sophisticated understanding of symbols and language, of myths and ceremony, of decoupling, or the interplay of social and cognitive processes, of the impact of organisational fields, of the potential for individuals and groups to shape their

environments, and of the processes through which those environments shape individual and collective behaviour and belief' (Lawrence et al., 2009; p. 2).

New institutionalism as an established mainstream in the study of organisations, it "comprises a rejection of rational-actor models, an interest in institutions as independent variables, a turn toward cognitive and cultural explanations, and an interest in properties of supra individual units of analysis that cannot be reduced to aggregations or direct consequences of individuals' attributes or motives" (DiMaggio and Powell 1991 p.8). This group of research was inspired by several seminal papers published in the 1970s and soon captured abundant academic interest across other social sciences. One of these social sciences is accounting. Since then, institutional theory has become one of the dominant ways of understanding organisations (Greenwood et al. 2008) hence it provides a theoretical lens that contributes to the understanding of accounting practice in the organisational context.

Classic conceptions of accounting as a social science beyond the organisational borders go back to the early twentieth century (Chapman et al., 2009a). Max Weber put accounting at the heart of capitalism and was concerned with the conditions which gave rise to the wide spread of calculative practices and the calculative attitude (Weber 1904; Weber 2009). According to Weber, double-entry bookkeeping is the most advanced form of bookkeeping and it permits the check of each individual step towards profitability (Weber 2009). Since the 1950s, a group of studies which explored the behavioural aspects of accounting within organisational borders helped placing accounting research within the social sciences (e.g. Argyris 1952; Simon et al. 1954). This is the first line of development in the intellectual history of accounting scholarship. It contrasts with the second line - the market based accounting - which focuses on classifications and external reporting. The first line of development in accounting later took an 'institutional turn' (Miller and Power, 2013; p. 559) which interfaces with

both management and organisation studies literatures (Miller & Power 2013). It is this first line of research that guides this literature review.

Up until the mid-1970s, this group of research focused exclusively on intra-organisational aspects rather than going beyond the organisational borders (Burchell, Clubb, & Hopwood, 1985; Chapman et al., 2009a; Hopwood, 1987). Hopwood, in the first editorial of *Accounting, Organizations and Society* in 1976, pointed out that 'the accounting academician has seemingly preferred to focus in a fragmented way on more detailed behavioural questions with little consideration of their on-going organizational and social context' (Hopwood, 1976: 288). Subsequently, the seminal work by Hopwood (1978) redirected accounting research effort beyond the organisational to the social and institutional. Another influential paper by Burchell et al. (1980) took this initiative one step forward and provided several suggestions as how this discipline should develop and evolve. Instead of looking at accounting as mere techniques for producing relevant information for decision making or for the rational allocation of resources, accounting have been seen by this group of scholars as 'mirrors of the societies or organizations in which they are implicated' (Burchell et al., 1980:10). They argued that two tendencies were crucial to the understanding of the state of accounting: 'the increasing institutionalization of the craft and the growing objectification and abstraction of accounting knowledge', especially, 'the institutionalization of accounting has occurred at both the organizational and societal levels' and 'within both business and governmental organizations'(Burchell, Clubb, Hopwood, Hughes, & Nahapiet, 1980: 7).

In the early 1980s, accounting research was stimulated by the development in neo-institutional theory and the behavioural aspects of accounting started to attract the attention of organisational researchers. Accompanying this trend was the increasingly dominant narratives of market rationality through accounting (Miller & Power 2013). Accounting, seen as an organising and

rationalising mechanism started to be analysed beyond its technical and functional core. Linking accounting practices, modes of organising and societal processes of economizing have 'transformed the discipline of accounting' (Miller and Power, 2013; p. 558). These developments have been accompanied by the increasing fragmentation and professionalization of the accounting profession which give accounting a wider social significance and increasing complexities in research (Power 1997; Power 2004).

'If organizing without accounting is increasingly unthinkable today, accounting also makes organizing thinkable and actionable in a particular way' (Miller and Power, 2013; p558). Therefore, while accounting is profoundly technical on one hand, it is profoundly institutional on the other (Miller & Power 2013). Accounting having an institutional and economising role in organisational activities is particularly of interest to all organisations with an accounting function. Power (1994) observes that the society that has been subjected to increasing emphases on monitoring and measuring through accounting has been termed as 'audit society'. Bromley and Powell (2012) argue that this 'pervasive spread of rationalizing trends, such as the growing influence of managerial sciences and increasing emphases on accountability and transparency, has created significant changes in organizations' external environments'(Bromley and Powell, 2012; p.483).

Not only is this relevant to the private sector, it is also of great interest to the public sector organisations as calculative practices such as performance measurement penetrate not-for-profit organisations as well. As a result, an increasing number and variety of not-for-profit organisations are viewed as economic entities (Burchell et al. 1985; Miller 1990). For example, in the study of museum and culture heritage sites of Alberta, Canada, Oakes, Townley and Cooper (1998) argue that when the museum is run as an economic entity, the whole operation of the museum must be first reduced to accounting numbers for them to be acted upon. This dictates that employees adopt a

particular way of understanding the nature of their work. In a subsequent study, they investigated the performance measurement in the Provincial Government of Alberta and its role in the rationalization and justification of activities in the public sphere (Townley et al. 2003). The distinctive way of rationalisation represented by accounting technique (performance measurement with instrumental reasoning) was found to be in conflict with the intended rationalisation as a process of reasoned justification (open and conscious reflection of the criteria for action). This leads to the eventual scepticism and cynicism of the managers. Similar stories can be found in the studies conducted in healthcare organisations. When hospitals are treated as economic entities, the criteria for action must be shifted to, revealed and acted upon through the language of accounting. The issues of efficiency and value for money will intervene with the professional code of conduct for the medical professionals which could lead to the narrowing of accountability, potential conflicts and dysfunctional consequences (Arnold & Oakes 1995; Kurunmaki & Miller 2006; Kurunmaki et al. 2003; Kurunmaki 1999).

Findings suggest that diverse activities such as healthcare, education, public services are increasingly structured around performance evaluation, risk assessment, profitability analysis and other forms of accounting representation(Miller & Power 2013). Accounting and calculative practices also play important roles in various other aspects of social life, such as fashion(Jeacle & Carter 2012), cinema (Jeacle 2009), popular culture (Jeacle 2012). These studies address a similar issue with the 'governmentality' and 'calculative spaces' literatures that individuals come to think of themselves and others and their actions calculable and governable, albeit at a distance. From this point of view, accounting plays a vital role in constructing the relationships among individuals, organisations and the society as a whole. And in turn, the society and organisations and individuals can be rendered down to certain number sets (Miller & Power 2013).

The power that accounting has in shaping the world attracts scholarly attention from accounting researchers with a variety of research approaches mainly because the thing we call 'accounting' is complex as it exerts and is at the same time affected by agents and their agencies, institutions and organisational processes (Miller & Hopwood 1994). The conceptualisation of accounting can be a practice, an ideology, a technology, a social force and maybe all of the above or none of the above (Burchell et al. 1985). As an important practice which is attempt to intervene individuals and organisations, it is crucial to consider accounting not as the neutral device which offers superior information for the management of organisational and economic life. Rather, accounting practices have intruded various aspects of the society (Miller & Hopwood 1994). Therefore, in order to study the multiplicity of accounting practice, various theoretical approaches have been brought in to inform accounting research (Ahrens & Chapman 2007).

This thesis takes a social constructionist stand and is informed mainly by institutional research. It is this social dimension of meaning which takes the centre stage of this approach (Crotty 1998). The next chapter is devoted to a detailed review of the development of institutional theory in the social constructionism paradigm; but first, the relationship between institutional theory and critical accounting research is reviewed below.

2.4 Institutional Theory and Critical Accounting Research

Carruthers (1995) argues for a high level of relevance between institutional theory and accounting research. Accounting practices are viewed as features that can legitimate organisations through portraying the image of efficiency and rationality. This is especially relevant to research in the public sector context, in which organisations are suspected to adopt new accounting

practices for legitimacy reasons or as a means to secure funding. Therefore, research has found many occasions of decoupling or loose-coupling between formal organisational structures and actual processes (Lukka 2007; Weick 1976; Bromley & Powell 2012).

Despite this internal critical quality of institutional theory (which challenges the taken-for-grantedness), much of the theoretical development tends to follow the North American positivistic epistemology with an objectivist research tradition. This misalignment between ontological assumptions and epistemological commitments is labelled 'ontological drift' (Thompson 2011) which creates difficulty in combining institutional theory and critical accounting research (Modell 2015).

Thus, there is a danger in following the North American organisation studies and institutional research and ignoring the critical tradition of accounting studies in addressing bigger issues. This thesis strives to participate in the debate of public sector management and reforms. And a critical perspective is essential to this purpose. On the contrary, some European accounting researchers have taken a more subjective epistemological standing in conducting critical accounting research (e.g. Cooper and Hopper, 2006; Hopper and Armstrong, 1991; Hopper and Powell, 1985). Recent development in institutional theory also resembles the ambition of critical accounting research which addresses 'big social issues' such as inequality, corruption and status (such as Gabbioneta et al., 2013; Podolny, 1994).

Critical accounting research has been challenging the theoretical orthodoxy since the 1970s. Questions such as 'in what ways and to what extent is accounting implicated in de-industrialisation, de-skilling at work, conflict in society and increasing individualisation, rationalisation and calculation in society'(Cooper and Hopper, 1987, p407) were brought to the fore of issues to be addressed in such research regime. Such questions are still of vital

importance today. In a recent comprehensive review of all the papers published in Management Accounting Research (MAR), Hopper and Bui (2015) propose the question of 'has MAR been critical' and identify areas that are under-researched, such as Third Sector organisations, politics, civil society involvement. At the same time, themes such as change and institutional theory, reconstituting public sector have attracted reasonable amount of attention. However, the organisations addressed in this thesis sit between public sector and third sector. This group of organisations differ in nature from typical government agency, or health and education sectors, which have dominated the management accounting literature in these themes. The trend of 'governing by numbers' seems unstoppable in contexts addressed in this thesis however dynamics and consequences differ from those already addressed in management accounting literature.

Miller and Power (2013) identified four interrelated key roles of accounting that makes it possibly 'the most powerful system of representation of social and economic life that exists today' and 'has achieved a dominant role in contemporary society' (Miller and Power 2013; p. 563). These four roles are *territorializing, mediating, adjudicating* and *subjectivising*. The territorializing role of accounting means that accounting has the ability to delineating particular physical existence and activities into calculable spaces, such as a factory, a hospital into divisions, cost centres. Due to this, financial calculations are made possible. Closely related to territorializing is the mediating activities that accounting is capable of. Accounting allows the incomparable to be made comparable and permits the claim of neutrality. This allows it to be diffused across different domains (such as public sphere). Once embedded in organisational life, the language of accounting will require and inspire further production of such language and make it indispensable. The development of ideas of markets and market value also demands the use of accounting language. Furthermore, accounting also plays

a fundamental adjudicating role in organisational processes. This has attracted scholarly attention from both sociology and accounting research communities (e.g. Meyer and Rowan, 1977). The institutionalisation of rationalised myths has been documented in accounting research inspired by the development of neo institutional theory that practices such as accounting, performance measurement and auditing appear to be decoupled or loosely coupled to real organisational activities as a means of legitimacy seeking (Bromley & Powell 2012; Modell 2004; Power 1994; Power 2004). The fourth role of accounting is that it is a subjectivising or individualizing practice both within organisations and more society wide. It has two aspects: first, individuals are subject to control by another; second, it assumes that individuals are free and obliged to choose often by reference to financial norms. Hence, individuals are made somewhat calculable and comparable (Rose & Miller 1992; Miller & Hopwood 1994). These four interrelated roles make accounting an ensemble of diverse elements which are constantly changing and self-regenerating (Miller & Power 2013).

CHAPTER 3. THEORETICAL FRAMEWORK

This chapter aims at reviewing the development of institutional theory; identifying the weaknesses of the current state of institutional theory; exploring the feasibility of enriching institutional approach at the macro level with Bourdieu's field concept and at the micro foundation level with input from psychoanalysis theory.

The chapter is structured as follow: it begins with a comparison of the two prominent perspectives in studying accounting changes: old-institutional economics (OIE) and neo-institutional sociology (NIS) and provides justification of choosing the NIS approach. It is followed by a detailed review of the development of institutional theory from its early inception to the latest theoretical paths. The next section aims to illustrate the important concept of 'institutional complexity and multiplicity' which is key to informing the empirical investigation. The next two sections are devoted to enriching the current institutional lens with input from Bourdieu's field concept at the macro level and psychoanalysis at the micro level to derive a complete theoretical framework for the thesis.

3.1 OIE and NIS

Two strands of institutional theory have been widely adopted to study accounting practices, Old Institutional Economics (OIE) and Neo-institutional Sociology (NIS) (Ribeiro & Scapens 2006).

NIS was developed in the 1970s primarily to inform macro-level empirical investigations (Meyer & Rowan 1977). With key concepts, such as 'decoupling'(Meyer & Rowan 1977) and 'isomorphism' (DiMaggio & Powell

1983), NIS aims at explaining the diffusion of particular organisational structure or practice within a population across an institutional field (detailed review of NIS, see section 3.2).

Primarily concerned with intra-organisational practices and managers behaviour, Scapens (1994) introduces old-institutional economics approach which rejects the core assumptions of neoclassical economics. He argues that this approach is useful for studying management accounting practices, especially using case studies (Scapens, 1994, p302). Apart from this theoretical contribution, this influential paper also encourages management accounting researchers to look at the social, political and cultural dimensions of accounting rather than fixating on some 'ideal' from textbooks.

Building on Scapens's work, an OIE based theoretical framework for conceptualising causes and conditions of management accounting changes was developed by Burns and Scapens (2000). This seminal paper provides a processual model to study intra-organisational management accounting changes and focuses on two key concepts 'rules' and 'routines' to unpack the complex relationships between actions and institutions. They argue that whereas rules and routines are grounded in their historical context, institutions are disassociated from their particular circumstances and they exist only in the actors' understandings and stocks of knowledge and express for them 'the way things are' (Burns and Scapens, 2000, p7).

Choosing NIS as the main theoretical lens, this thesis is concerned with cross-level (both macro and micro) analysis of management accounting practices which can be better analysed through the recent developments in NIS, namely Institutional Logics Perspective (ILP) and Institutional Entrepreneurship (IE) and Institutional Work (IW). These recent theoretical developments provide the possibility to integrate the macro with the micro.

As OIE lacks consideration for macro societal value systems at the macro level, this thesis adopts primarily an NIS perspective.

More specifically, this thesis investigates the processes which lead to the making of rules and how sometimes, in specific empirical contexts, accounting was introduced as 'rules' but never became 'routines'. This is beyond the framework proposed by Burns and Scapens (2000). More importantly, this thesis is interested in investigating both the diversity of institutions within the same institutional field (macro) and the diversity of institutions within the same organisation (micro). The OIE framework lacks consideration about the intra-organisation institutional multiplicity. Recent developments in NIS provide such lens to examine the institutional multiplicity within and across organisations on both the macro and the micro levels (detailed discussions see section 3.3 and 3.4).

3.2 Early Development of Neo-Institutional Sociology

In Latin, the term 'institution' means 'a human, intentional act of creating and enacting some type of collective practice' and in everyday sense, an institution is a public administration organisation. In Goffman's classic book on total institution, he defines institution as 'social establishments… are places such as rooms, suites of rooms, buildings, or plants' (Goffman 1961; p. 15) and also a legitimizing social grouping. The institution in institutional theory is more of a framework of thinking about social life and a taken-for-granted way of organising. For example, when you hold out your hand for a handshake, you hold out the right hand without thinking about it. It is taken-for-granted.

It has been argued that European institutional theory has initially drawn from Max Weber, Emile Durkheim and Anthony Giddens (Czarniawska

2008). However, there are many different approaches to its definition. For neo institutionalism, institutions are enduring elements of social life (Hughes 1936) and templates for action, cognition that affect beliefs and behaviour of individuals and collectives which are resilience and self-activating (DiMaggio and Powell 1983; Lawrence, Hardy, and Phillips 2002; Meyer and Rowan 1977; Scott 2013). Berger and Luckmann (1967) suggest that institutions shape people's actions and at the same time actions constitute and reproduce institutions.

The seminal article by Meyer and Rowan (1977) is one of the important precursors to later developments of institutional theory. Many agree that this paper mark the start of new institutional theory (Greenwood et al. 2008). Early institutional research asks one simple question 'why organisations resemble each other' and explores the environmental effects on organisational and structural homogeneity. Meyer and Rowan (1977) pioneered a new variant of institutional theory that formal organisational structures may not relate to technical efficiency. Instead, they might be the result of legitimacy seeking behaviour which leads to the conformity to the organisations' environmental and institutional rules (the cultural myths and symbols). They further elaborated that as a result of this proposition, organisations might look more similar in form and forms might decouple from practices. Legitimacy is necessary for organisations to survive in their institutional environment.

Institutional theory has long been influencing management accounting research. Rather than assuming accounting facilitating rational decision-making, institutional theory challenges the assumption of economic rationality by providing alternative basis for decision - making. At the same time, institutional theory is a vibrant theory, which has been undergoing rapid development since 1970s. As a result, institutional theory provides depth and richness to the findings, nevertheless difficulties when applying

such a developing lens to empirical investigation. This chapter examines the development of institutional theory as a theoretical lens, and reviews the major accounting research informed by such institutional lens.

As Greenwood, Oliver, Sahlin and Suddaby (2008) conclude that since its inception, neo institutional theory has achieved impressive use and migration within and across disciplines. They understand the term institution as '*more-or-less taken-for-granted repetitive social behaviour that is underpinned by normative systems and cognitive understandings that give meaning to social exchange and thus enable self-reproducing social order.*'(Greenwood et al., 2008; p. 4) They believe the proliferation of institutionalism can be attributed to three factors. Firstly, the wide range of application of the neo institutional theory reveals the ability to accommodate other theoretical perspectives when interfacing with numerous other theories (for example, resource dependency theory, network theory, etc.) The use of institutionalism with many other theories constitutes a great strength. Secondly, the authors argue that 'a distinct advantage of institutional theory… is its singular refusal to accept reality at face value, and to do so without the accompanying baggage of cynicism.' (Greenwood et al., 2008; p. 32) Therefore, it provides an invaluable point for reflection that any given aspect of organisational life might be social consensus that is easily perishable. Especially when we look at calculative practices and the rationality and instrumental functionality that they possess, institutional theory provides an alternative perspective. Thirdly, institutional theory can stimulate contextualising. We cannot understand accounting practice without its social context (Hopwood 1987). As through the lens of institutional theory, the reality is socially constructed so is accounting. When using institutional theory as theoretical lens, accounting practice is forced out of the technical vacuum.

Due to the size of institutional theory literature[1], this review is by no means comprehensive. Preference is given to institutional studies, which have inspired management accounting research. The following review is arranged in different themes and follows a rough chronological order. However, some of the themes are still attracting great research attention while others might have slowly faded out.

3.2.1 Mechanisms of Diffusion and Convergence

Following Meyer and Rowan (1977), institutional research in the 1980s have investigated the mechanisms that lead to such similarity among organisations as well as the mechanisms which lead to the diffusion of certain organizational form or practice.

While Meyer and Rowan (1977) looks mainly at the macro level societal cultural system of taken-for-granted rules, Zucker (1977) uses experiment to examine the micro level effects of institutionalisation on cultural persistence. It is found that when there is higher degree of institutionalisation, there is greater cultural persistence. And the taken-for-granted rules are perceived by individuals as facts and therefore rarely challenged. One other aspect of the importance of this work is that it supports the proposition that the institutionalisation process is driven by cognitive process, not necessarily value internalisation suggested by earlier sociological studies at that time (e.g. (Parsons 1951)).

Building on Meyer and Rowan (1977), DiMaggio and Powell (1983) further argue that organisations become more similar in form is driven less by the pursuit for efficiency but more by the structuration (Giddens 1979) of the organisational fields. Engine of rationalisation and bureaucratisation, they argue, has moved from the market and into the state and the profession.

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[1] The seminal paper (Rowan and Meyer, 1977), which signals the start of institutional theory research, has been cited over 20,000 times by October 2015, according to Google Scholar.

DiMaggio and Powell define isomorphism as 'a constraining process that forces one unit in a population to resemble other units that face the same set of environmental conditions' and they elaborate this by defining two types of isomorphism, competitive and institutional. Competitiveness among organisations leads to 'the economic fit' and quest for political power while institutional legitimacy has led to 'the social fit'. They then theorise that there are three sources of rationalisation and rational actors change their organisations through these three isomorphic processes – coercive, normative, and mimetic. Tolbert and Zucker (1983) investigate the diffusion and institutionalisation of formal organisational structure and developed a well-referenced 'two stage model'. They find that early adoption of reform is related to internal organisational requirements while once the adoption becomes taken for granted, late adoption is often motivated by institutional legitimacy seeking. However, this model has been found inadequate later (Greenwood et al. 2008).

Scott (1995) identified three vital ingredients of institutions. They are regulative systems, normative systems, and cultural-cognitive systems. These ingredients form a continuum from conscious (regulative) to unconscious (cognitive). These ingredients are independent yet mutually reinforcing. Although later, this conception has been criticized to be overly deterministic (Greenwood et al. 2008).These classical studies laid the foundations for neo-institutional approach.

The studies reviewed above focus more on macro structure and demonstrate that societal level discussions are important to the development of institutionalism. Societal level 'institutions' have various implications on organizational practices such as accounting.

Studies at the organisational level are also important precursors to the later developments in institutional theory, Fligstein (1985) looked at the

dissemination of multidivisional organisational form among large firms from 1919 to 1979. He tested five theories that set out to explain why and how the multidivisional organisational form has disseminated. The approach of DiMaggio and Powell (1983) was one of them. It was found that actors operate with varying rationalities during organisational change. Fligstein (1987) investigated the intra-organisational power struggle from 1919 to 1979 and found that through different periods in time, different personnel rise to power. Early this century, entrepreneurs and people from manufacturing were more likely to controlled large firms; however, later the century, sales and marketing were likely to rise to power; and in the last few decades, finance personnel have become more dominant. He argues that these shifts result from changes in strategy, structure and the environment of the organisations. Mimicking of firms in similar environments played a role in determining the change in organisational structure and power structure. One other important findings and important precursor is that it is found that within a corporate logic, there can still be contending logics of action and practices. For example, engineering, sales and finance personnel all have different conceptions of how the organisation should be run and structured. This suggests the existence of pluralism in institutional logics within organisations.

Fligstein (1990) further identified three different conceptions of control in the corporate governance of large industrial firms: the manufacturing conception, the marketing conception and the finance conception. For Fligstein, the individuals are the carriers of the conceptions of control. As both the intra-organisational power struggles and the inter-organisational competition all happen during a time of innovation and changes, none of the conceptions became dominant. At the supra organisational level institutions, the profession, the corporation and the State implicitly interplay and they become important inspiration to the development of the institutional logics

perspective (Thornton and Ocasio, 2008a). This body of research collectively demonstrate that institutions are influencing practices, structures and behaviour, which is implicitly linked to the overall mode of thinking/rationality.

These early research provide insights into why organisations adopt similar accounting techniques such as activity-based costing. For example, in the studies addressing the adoption of Activity Based Costing (ABC), Malmi (1999) surveyed almost 500 Finnish companies on their motivations for the adoption, their conclusion resembled that of the popular two stage adoption model developed in Tolbert and Zucker (1983). In other accounting research, early institutional theory developments on diffusion and convergence have been employed to inform studies of public sector reform and the adoption of new accounting practices for possible legitimacy seeking reasons or for the security of resources such as funding. Later institutional studies also examine legitimacy as a key concept.

3.2.2 Divergence, Noncompliance and Legitimacy

Legitimacy, isomorphism and decoupling are the symbolic concepts of the neo institutionalism which set it apart from other organisation theories (Boxenbaum & Jonsson 2008; Deephouse & Suchman 2008). The accounting research inspired by neo institutional theory tends to focus on these key concepts. Each of these concepts also has a large and diverse group of literature. Much scholarly effort also went in to explore the causal relationship between two or more of these concepts. These concepts share close theoretical ancestry as most organisation studies scholars credit Weber for bringing these concepts into sociology. And the two subsequent seminal papers by Meyer and Rowan (1977) and DiMaggio and Powell (1983), and the review book by Scott (1995) further contributed to the popularising of research on these concepts.

For example, research has shown that various organisations adopt certain practices symbolically while decoupling them from actual routines (Meyer & Scott 1983; Deephouse & Suchman 2008; Elsbach & Sutton 1992; Zajac & Westphal 1994). Research have produced insights into why decoupling occur. To signal compliance, organisations might engage in such practice in the face of institutional pressures (Scott 2013).

Weber argues that legitimacy can come from conformity to laws and social norms (Weber 2009). Parsons (1951) applied Weber's idea and argue that legitimacy is an organisation's congruence with social norms, values and laws. In Meyer and Rowan (1977), legitimacy was placed together with resources and they suggested that both of these factors may result from being efficient and from conforming to institutional environment although Meyer and Rowan did not provide an explicit definition of legitimacy. In a subsequent article by Meyer and Scott (1983), organisational legitimacy was defined as '*the degree of cultural support for an organization – the extent to which the array of established cultural accounts provide explanations for its existence, functioning, and jurisdiction, and lack or deny alternatives...A completely legitimate organization would be one about which no question could be raised*' (Meyer and Scott, 1983; p. 201). They argue that professional groups, such as accountants, convey legitimacy by their collective authority. Scott (1995), in the first edition of his review book *Institutions and Organizations*, he stated that 'legitimacy is not a commodity to be possessed or exchanged but a condition reflecting cultural alignment, normative support, or consonance with relevant rules or laws' (Scott, 1995; p. 45). Linking with his three pillars of institutions, Scott (1995) arrived at three dimensions of legitimacy – regulative, normative and cognitive. In the same year, Suchman published his pivotal article on legitimacy in *Academy of Management Review,* he gave a broad definition of legitimacy: '*Legitimacy is a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within*

some socially constructed system of norms, values, beliefs, and definitions'
(Suchman, 1995; p. 574).

Research on legitimacy is closely linked to studies on diffusion and isomorphism which are further linked to decoupling (loose-coupling). Decoupling (loose-coupling) as a concept was introduced by in 1976 by Weick in a study about educational organisation. It is argued that the image of organisations having tight couplings in their operation is often an illusion. Instead, a surprising number of disparity suggests that decoupling and loose-coupling are more than often the case (Weick 1976). Soon after the introduction of the concept, it was widely used and a high level of diversity in the understanding of the concept led to a review and reconceptualization of the concept by Weick and Orton. Tolbert and Zucker (1983) linked cognitive legitimacy with mimetic isomorphism and argued that organisations will imitate those legitimate organisations in their field and adopt innovative practices which lead to diffusion. The implicit assumption of this research is that because of legitimacy seeking purposes, organisations adopt new practices which contribute to the diffusion of these practices. What's worth noticing is that not all diffusion enhances legitimacy and not all diffusion necessarily leads to institutionalisation or isomorphism.

These institutional theory concepts inspired a group of accounting research, especially in the public sector context. The modernisation processes provide public legitimacy for organisations as the profession and the state provide rationalised myths and rules which then influence the formal organisational structure such as accounting infrastructure and practice. It is argued that the modernisation trajectory that many public sector organisations are on is a pathway to public legitimacy (DiMaggio and Powell 1983; Meyer and Rowan 1977; Tolbert and Zucker 1983; Zucker 1977).

Therefore, accounting studies inspired by earlier neo institutionalism often observe that despite the significant external influences which requires change, accounting system can be stable and often difficult to change (Ezzamel, Hyndman, et al. 2007; Kurunmaki et al. 2003; Lapsley & Wright 2004; Ballantine et al. 1998; Modell 2004; Modell 2001; Granlund 2001) and also known as path-dependency in neo institutionalism (Modell et al. 2007; Ribeiro & Scapens 2006). As NIS develops, fresh perspectives have been brought into accounting research to enrich the empirical insights. However, institutional theory itself is still burgeoned by the paradox of embedded agency (Seo & Creed 2002; Greenwood & Suddaby 2006; Greenwood et al. 2008).

3.2.3 Institutional Reflexivity and Agency

The above reviewed earlier studies in institutional theory were concerned with explaining the convergence of practices and structures with core concept like legitimacy and decoupling. These key concepts of NIS research were later criticised for being too rigid and for relying too much on an over-socialized view of action (Seo & Creed 2002). Institutional change becomes a challenge for institutionalists to explain because if actors are embedded in institutional environment and their behaviour is shaped by the institutional context then how can they change the institutions they are in? It has been observed that the earlier research in institutional theory has over played stability and change is not accounted for (DiMaggio 1988; Hirsch and Lounsbury 1997; Seo and Creed 2002).

This is due to a contradiction between institutional determinism and human agency (Holm 1995). Seo and Creed (2002) label this contradiction as 'the paradox of embedded agency'. The agency versus structure debate has a much longer history than institutionalism (Giddens 1979). The relationship between actors and their environments has two extremes. One is determinist

when it is believed that individuals and their actions are product of the environment and there is little human agency. The other extreme is voluntarist view which assumes that actors are autonomous and free to choose (Astley & Ven 1983; Burrell & Morgan 1979). For example, the rational actor model which dominates economics research takes an extreme view of agency by assuming actors always choose utility maximisation. Institutional theory relaxes this assumption by providing a more realistic view of social activities. Although institutional theory takes the external influences into account when conceptualising actors' behaviour, it still suffers from this paradox. Concerns over legitimacy and isomorphism suggest that behaviours are influenced by the environments they are embedded in, therefore, although not unique to institutional theory, the tension between agency and institutions is inherent (Battilana & D'aunno 2009).

Thereafter, institutionalists started looking for a way to further develop institutional theory. One of the key issues is change. In retrospect, it is believed that the three theoretical papers by DiMaggio (1988) and Oliver (1991, 1992) started the shift in the attention of institutional researchers towards the agency of actors towards influencing and impacting the environment they are in (R. Greenwood & Hinings, 1996; R Greenwood et al., 2008). Rather than assuming they are passive acceptant of institutional influences, the agents are capable of reflection and in turn change their environment.

Three diverse routes were taken by different groups of scholars motivated to solve the paradox of embedded agency (Seo & Creed 2002) and bring agency back into institutionalism without denying institutional embeddedness. These developments move beyond the vague notion of institutional pressures shaping actors' behaviour to emancipate themselves from the deterministic views of traditional institutionalism works (Lawrence &

Suddaby 2006; Leca & Naccache 2006; Thornton & Ocasio 2008). These theoretical perspectives intend to provide deeper explanations of the change and the reproduction of institutions. They are the institutional logics perspective, institutional entrepreneurship and institutional work. These represent the current state of development of institutional theory and are adopted as the main theoretical lenses to inform the empirical chapters that follow.

However, institutional theory is still under development looking for ways ahead to overcome the agency paradox. This thesis, taking advantage of an opportunity to study management accounting practices across different levels of the field under investigation, aims to contribute to institutional theory regarding its micro foundation and cross-level dynamics.

Smets et al. (2012) points out that institutional research have focused mainly on macro-level processes which tend to examine the field level and organizational level dynamics. This approach has been criticised for lacking micro-level insights. Accounting practices provide a naturally micro-level starting point. Therefore, institutional changes can arise from day-to-day accounting practice.

The three branches of institutional theory developments reviewed below provide the framework and vocabulary to examine cross-level dynamics.

3.3 Diverging Paths of Recent Development

In this section, three recent developments in institutional theory are reviewed. They are Institutional Logics Perspective (ILP), Institutional Entrepreneurship (IE) and Institutional Work (IW).

3.3.1 Institutional Logics Perspective (ILP)

It was Friedland and Alford (1991) who explicitly conceptualise that in the western countries, societies are 'inter-institutional systems' that are comprised of multiple institutional logics (Greenwood et al. 2011). And this article is commonly regarded as the start of the institutional logics perspective (ILP). ILP is a strong upcoming approach in the broader context of institutional theory and institutional analysis.   The term 'institutional logics' was introduced by Alford and Friedland (1985).They argue that there are inherent contradictory practices and beliefs in the three institutional orders of the modern western societies: capitalism, state bureaucracy, political democracy. These three institutional orders then shape how individual engage in different practices. They further developed the concept in Friedland and Alford (1991) by exploring the interrelationships between individual, organisations and society. They define institutional logics as '*a set of material practices and symbolic constructions – which constitutes its organizing principles and which is available to organizations and individuals to elaborate* (p. 248)'. They further developed the core institutions of society into five distinctive institutional orders which act as organising principles of an inter-institutional social system*: the capitalist market, the bureaucratic state, nuclear family, democracy and Christian religion*. Each of these orders contains a central logic that both constrains and enables behaviour of individuals, organisations and society. While institutions constrain action, they also give agency and then give rise to change. The inherent contradictions of practices and beliefs in these institutional logics provide the cultural resources for institutional change, for transformation of individuals, organisations and society.

ILP was born when research in this area largely focused on isomorphism and homogeneity (Mizruchi & Fein 1999). In 1999, the article by Thornton and Ocasio (1999) has brought Alford and Friedland (1991) into the spot light of

institutional research. In Thornton and Ocasio (p. 804), they defined institutional logics as '*the socially constructed, historical patterns of material practices, assumptions, values, beliefs, and rules by which individuals produce and reproduce their material subsistence, organize time and space, and provide meaning to their social reality*'. This definition of institutional logics provides a link between individual cognition and agency and individual practices. It also provides a framework for analysing the relationships among individuals, organisations and institutions in the inter-institutional social system. This framework provides potential explanation for heterogeneity as well as change. Hence, it can potentially solve the problem of embedded agency (Seo & Creed 2002; Greenwood & Suddaby 2006). Research on institutional logics has proliferated since then.

This strand of theoretical development was taken further by Patricia H Thornton (2004). She fully explores how institutional logics impact organisational decision making in the higher education publishing industry. She conceptualises the market in her book as historically contingent, distinguishing it from being a negotiation between economic exchange and political/cultural arena. She defines institutional logics as '*the axial principles of organisation and action based on culture discourses and material practices prevalent in different institutional or societal sector*' (p. 2). Further elaboration is provided on the notion of ideal types developed as 'intended to provide an abstract model that represents a combination of those attributes believed to determine the dependent variables of interest. The idea types provide a means of clustering organizations into categorical types to measure and explain deviation from the extreme (p. 25)'. In her case study of the higher education publishing industry, Thornton connects institutional logics to a theory of 'attention'. She argues that institutional logics operate via multiple mechanisms: first, logics shape meanings, appropriateness and legitimacy; second, logics determine problems as well as solutions; third, logics impact

change. Her argument in this case is that the shifts in organisational logics in this industry are reflected in the changes in problems and solutions. Hence, the logics decide which problems and solutions the decision makers focus on. She developed the five institutional orders in Friedland and Alford (1991) based on six sectors each with their own distinct logics: *markets, corporations, professions, states, families and religion.* She argued that institutional logics shape rational, mindful behaviour while individuals and organisations can also shape and affect institutional logics (Thornton 2004).

During the early 2000s, the phrase 'institutional logics' has become increasing popular, to a point that they might get 'distorted and overextended and they burn-out of existence'(P. Thornton & Ocasio, 2008 p. 99). Thornton and Ocasio (2008) briefly review the development of institutional logics, present a literature review on the works published before 2007, reflect on the definitions and contributions institutional logics perspective has brought to institutional analysis, and also critique the literature to suggest directions for further development on organisations and institutions. They root the concept of institutional logics within the context of new institutional theory and institutional analysis, going back to Selznick (1948).

Building upon the growing interest in understanding institutional logics, this stream of research focused on developing the institutional logics perspective into a meta-theoretical framework for analysing the relationships among individuals, organisations and institutions (Thornton, et. al. 2012). Although it is portrayed as a further development of neo institutionalism thinking, it seeks to distinguish itself from the neo institutional theory school in a number of ways. For example, two aims are attributed to the work i.e. 'to produce a primer that imparts a programmatic statement on the institutional logics perspective that distinguishes it from neo institutional theory and to synthesize and propose novel theory to further flesh out the meta-theory

initially suggested by Friedland and Alford (1991).' Also it is concluded that 'Friedland and Alford (1991) had begun a new direction for organization studies. Building upon, yet departing from, the foundations of neo-institutional theory, they initiated the development of a distinct approach, the institutional logics perspective.' They distinguish this approach from previous neo institutional research by incorporating both material and symbolic aspects of institutions and in contrast to prior neo institutional theory, provide general models (the inter-institutional system model and the cross-level effects model) on cultural heterogeneity. By integrating research in this stream of theory building and taking stock of the previous research, the authors strive to build a research community. Institutional logics perspective is defined as 'a meta theoretical framework for analysing the interrelationship among institutions, individuals, and organizations in social systems' (Thornton et al., 2012, p. 2).

As this theoretical approach is relatively new, there has been limited number of accounting studies explicitly informed by the institutional logics perspective (except, Ezzamel, Robson, and Stapleton (2012)) although the precursors to the institutional logics perspective has been influencing accounting studies for over three decades. In this study, use if made of the theorisation in Thornton et al., (2012) that in the society, which is an inter-institutional system, institutions operate at multiple levels with potential of cross-level effects. The levels are individual, organisational, field and societal. And these are all employed to provide a framework for empirical study.

3.3.2 Institutional Entrepreneurship (IE)

Public sectors in most developed countries face financial pressure and various reform initiatives. Changing existing 'ways of doing' to new ones are urgent tasks. Great financial resources and efforts go in to change existing institutions. Research has recognised that institutional changes are complex

with various forces and agents (Battilana, Leca, and Boxenbaum 2009). To address the paradox of embedded agency (Seo & Creed 2002) and to revive institutional theory from being overly rigid and therefore to be able to explain change, DiMaggio introduced this notion of 'institutional entrepreneurship' in 1988. In his paper, DiMaggio (1988) argues that 'new institutions arise when organized actors with sufficient resources (institutional entrepreneurs) see in them an opportunity to realize interests that they value highly' (DiMaggio, 1988; p.14). Just like entrepreneurs create new venture, institutional entrepreneurs create new ventures into the institutionalised template of organising. Institutional entrepreneurs can work to maintain or disrupt and change institutions (Battilana, Leca, and Boxenbaum 2009; Hardy and Maguire 2008). This potentially provide a framework for explaining change when the literature at time was criticised for overplaying the constraining side of institution and underplaying the agency of actors (Hardy & Maguire 2008). The term institutional entrepreneurship refers to '*the activities of actors who have an interest in particular institutional arrangements and who leverage resources to create new institutions or to transform existing ones*' (Maguire et al., 2004; p. 657). This definition has emphasized on the access to resources, which enables institutional entrepreneurs. Battilana, Leca and Boxenbaum (2009) define institutional entrepreneurs as '*change agents who, whether or not they initially intended to change their institutional environment, initiate, and actively participate in the implementation of, changes that diverge from existing institutions'* (Battilana et al., 2009; p.70). This definition, compared to the previous one, focuses on the nature of the changes which should be divergent from existing institutions and the intentionality of the actors.

In order to move on from an over-emphasis on the constraining effects of institutions, researchers set out to identify the factors that enable the institutional entrepreneurs to initiate change when research has recognised

how resilient institutions can be (Scott et al. 2000; Tolbert and Zucker 1996). The first question is who are likely to become institutional entrepreneurs. Institutional entrepreneurs can be either organisations (e.g. Greenwood and Suddaby, 2006; Greenwood et al., 2002; Lounsbury, 2002) or individuals or collectives (Fligstein 2001; Phillips et al. 2004). For example, Greenwood and Suddaby (2006) argue that through institutional contradictions, the embeddedness of elite organisations can be loosened. The asymmetry of resources can lead the resource-rich players to commit to existing institutional arrangement and align with current practices and become satisfied with how things are. They study the big five accounting firms and explore the factors that enable organisations to be institutional entrepreneurs. Institutional entrepreneurs can also be individuals or collectives. For example, Lounsbury (2002) examined the collectives of financial professionals in the field of finance and the change initiated by these collectives in constructing new institutional logics.

To address the question "who are likely to be institutional entrepreneurs?" several studies have examined the properties of institutional entrepreneurs. Mutch (2007) argues that individuals who are 'autonomous reflexive' are more likely to act as institutional entrepreneurs. Leca and Naccache (2006) look at organisation level rather than individual level and find reflexivity to be important for organisations to act as institutional entrepreneurs.

The active role of institutional entrepreneurs which make them somehow 'privileged' to act in a heroic way has spawned criticism (Delmestri 2006). The concern is that this instrumental view advocates a disembedded view of agency which is incompatible with institutional theory (Meyer 2006). The challenge is to precisely account for the role of embedded actors in the institutional change process. This view of agency implies a middle ground between agency as situated and the models of rational choices. Actor' cognition and behaviour are seen as constrained and enabled at the same

time but not completely determined by the institutions and culture. This led to a renewed interest in structuration theory (Barley & Tolbert 1997), critical realism (Thornton and Ocasio 2008b), German sociology of knowledge (Meyer 2006). These new perspectives enriched research on institutional entrepreneurship and helped to identify the field conditions that give rise to institutional entrepreneurship. This resolved the problem of embedded agency (Seo & Creed 2002).

Another line of enquiry also sets out to address this problem. Actors are viewed to have agency to change while constrained. First, their positions in the fields are crucial to their potential to act as institutional entrepreneurs. Powerful actors in dominant positions in their field can initiate change despite institutional embeddedness (Battilana 2006; Maguire, Hardy, and Lawrence 2004; Maguire, Phillips, and Hardy 2001). For example, Sherer and Lee (2002) find that large corporate law firm offices with the most prestigious adopt new practices. Apart from the social positions of the firms, they also find that resource scarcity drives and legitimacy enables these firms to act as institutional entrepreneurs. In fact, even central actors in a field might not be as embedded as suggested. Central actors might have access to alternative practices in other fields through different mechanisms. Rao et al., (2003) study the nouvelle cuisine movement in France from 1970 to 1997 and find that many leading French chefs visited Japan and obtained new ideas from completely different institutional field. Examining three individuals transposing diversity management practice to Denmark to solve immigrants' integration problem into the workforce, Boxenbaum and Battilana (2005) also find supporting evidence that individuals become enabled through exposure to organisational settings radically different from their own.

Evidence becomes even more mixed when it comes to the relative positions of actors in a field. While actors' social position can be regarded as a resource for them to draw on when initiating institutional change (Battilana, Leca, and

Boxenbaum 2009), several studies conclude that peripheral actors have less difficulty in developing ideas for change as they are less aware of the institutionalised norms and practice. Also as they are often disadvantaged because of their positions in the field, they are more likely to be motivated to bring change about (Greenwood and Suddaby 2006; Hardy and Maguire 2008). Another study by Lee and Pennings (2002) focuses on large professional service firms as well. By analysing the evolution of the Dutch accounting industry, the authors find that market feedback can influence adoption decisions if the new organisational form is favoured by the market (Lee & Pennings 2002). Studies have not only looked at relatively mature fields (Greenwood, Hinings, and Suddaby 2002; Greenwood and Suddaby 2006; Lounsbury 2002), but also how institutional entrepreneurs rise from emerging fields. Maguire et al. (2004) study the emerging field of HIV/AIDS treatment advocacy in Canada. They find that in order to institutionalise these new practices, institutional entrepreneurs connected various stakeholders and acquired legitimacy by occupying a 'subject position' and a bridging role. Through discursive and political manoeuvre, institutional entrepreneurs managed to stabilise the field level relationships. Compared to mature fields where institutionalised norms form the basis for legitimacy providing resource for institutional entrepreneurs to draw on, emerging field is yet to form widely shared norms. In this case, rather than conforming to existing norms, new norms need to be formed by aligning various stakeholder interests (Maguire et al. 2004). Hence, different degree of institutionalisation can present different opportunities for institutional entrepreneurs.

Some field conditions are likely to present opportunities for institutional entrepreneurs to emerge as well, such as uncertainty, problems, crises, tensions and contradictions (Hardy & Maguire 2008). Institutional

entrepreneurs might seek solutions to problems in their fields which lead to institutional change (e.g. Fligstein, 2001; Greenwood et al., 2002; Holm, 1995).

Institutions are shared norms and taken for granted meanings, therefore, drawing on the social constructionist view, different interpretation of these norms and meanings will lead to contradictions that at different levels might give rise to institutional entrepreneurship (Hardy & Maguire 2008). Heterogeneity can also enable institutional entrepreneurship as it gives rise to incompatible institutional arrangements and prescriptions. And Multiple institutional orders can give rise to alternatives which enable institutional entrepreneurs to take advantage of the opportunities presented (Battilana et al. 2009).

A large portion of the literature depicts the strategies and activities institutional entrepreneurs deploy to initiate and implement changes. These include construction of rationale and vision; mobilising resources and people; recruiting allies and motivating others. Institutional entrepreneurs construct rationales and create visions to make the case for change. They tend to provide legitimating accounts for their institutional projects (Creed et al. 2002). And they frame and theorise to justify a new solution or an alternative way of doing (Rao 1998). Some other studies on the construction of rationale by institutional entrepreneurs also take into account of the social and historical context. They have shown how institutional entrepreneurs have deployed alternative institutional logics (Seo & Creed 2002), cultural accounts (Creed et al. 2002), professionalization (Greenwood, Hinings, and Suddaby 2002; Rao 1998) and rules and regulations in the field (Haveman & Rao 1997; Garud et al. 2002). For example, institutional entrepreneurs can build their discourses using different vocabularies derived from multiple institutional logics. Promoters of socially responsible investment in France rely upon financial logic rather than environmental logic when arguing their case (Déjean et al. 2004). Sometimes the audience of the change is accorded a

role when institutional entrepreneurs use discursive interventions in constructing shared ideals (Boxenbaum & Battilana 2005) and collective sense making (Edelman & Suchman 1997). Institutional entrepreneurs mobilise a range of resources to help bring change about. These resources can include material resources (DiMaggio 1988), political resources (Greenwood and Suddaby 2006) or cultural resources (Creed et al. 2002). Institutional entrepreneurs often establish new relations with others to recruit allies to promote their change initiatives. This could either be a collective action or individual. Often this requires the institutional entrepreneurs to have good political and social skills to accomplish the task of effectively persuade and motivate others (Fligstein 2001).

Although much of the research has adopted an actor-centric approach which depicts institutional entrepreneurship as 'heroic' and focuses on the reflexivity and unique qualities that institutional entrepreneurs possess, it is argued that a more process-centric approach to focus on the struggles associated with institutional entrepreneurship is more desirable (Hardy & Maguire 2008). In contrast with actor-centric approach, process-centric approach views institutional entrepreneurship as emergent out of diverse activities and actors (Lounsbury and Crumley 2007) and intends to find out how outcomes, ranging from no change or very little change to radical change and total transformation of the field, are negotiated.

There has been a recent trend of moving away from heroic views of individuals towards individuals or collectives embedded in and navigating in specific social contexts by mobilising other actors to promote changes (Battilana, Leca, and Boxenbaum 2009). Battilana et al. (2009) provide a

model of the process of institutional entrepreneurship. (See Figure 2)
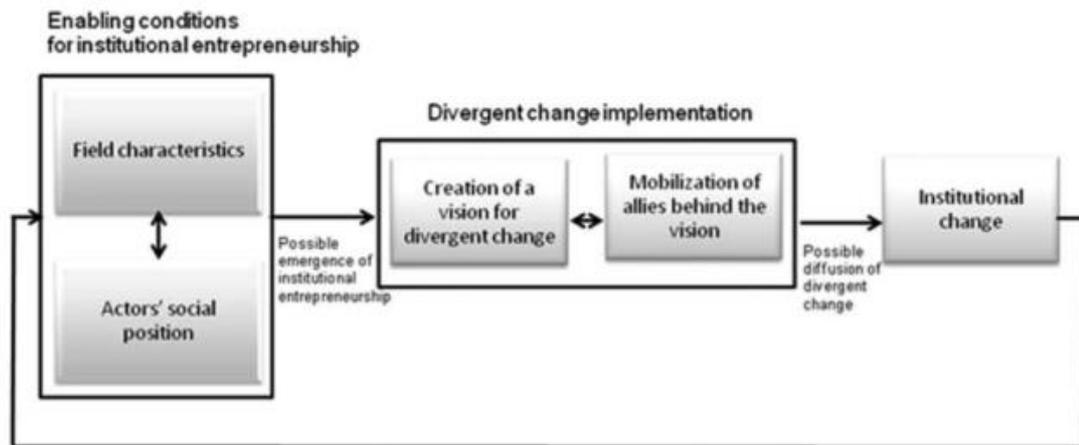
Figure 2 Model of Process of Institutional Entrepreneurship

The activities conducted by institutional entrepreneurs in motivating other actors, creating and sustaining a vision to institutionalise changes are rarely discussed in this literature. Most monographs lack the description and discussion on the actors' social positions, their awareness of other fields, their social environments as well as the diverse institutional. (Battilana, Leca, and Boxenbaum 2009). Battilana et al. (2009) also pointed out that community and individual levels of analysis is scant in institutional entrepreneurship research thus far. Also, most studies on institutional entrepreneurship have accounted for the actors' embeddedness in a given field but multiple embeddedness might be key in enabling institutional entrepreneurship (Boxenbaum and Battilana 2005; R. Greenwood and Suddaby 2006). The second empirical chapter (chapter 4) of this thesis aims to fill these gaps and provide insights into the micro processes that institutional entrepreneurs engage in to implement divergent change despite their multiple embeddedness in the fields.

3.3.3 Institutional Work (IW)

Another theoretical development aiming at explaining institutional change is institutional work. Lawrence and colleagues published three key essays to promote this theoretical concept (Lawrence, Suddaby, and Leca 2011; Lawrence, Suddaby, and Leca 2009; Lawrence and Suddaby 2006). Lawrence, Suddaby and Leca (2011) define institutional work as 'the practices of individual and collective actors aimed at creating, maintaining, and disrupting institutions' (p. 52). The heart of the concept 'institutional work' is that institutions are products of human action and reaction. Institutional work is not a new concept rather it intends to coordinate previously disparate ideas and consolidate previous research effort to forge a path forward (Lawrence, Suddaby, and Leca 2009). Instead of focusing on actors, research on institutional work focus on actions (Lawrence, Suddaby, and Leca 2011). As the role of actors ascend to the centre of institutional research (Lawrence and Suddaby 2006), a great deal of research attention has been paid to identify the enabling field-level and organisation-level conditions (Battilana and D'aunno 2009). This group of research overlaps with institutional entrepreneurship (discussed earlier in the previous section), or it can be seen as a re-orientation of the empirical research addressing institutional changes. Therefore, these enabling conditions resemble those reviewed in the institutional entrepreneurship section above.

This group of research took a different path from institutional entrepreneurship, though it is closely related to institutional entrepreneurship. Institutional work highlights the intentional actions taken to create, maintain or disrupt institutions. These actions not only include the visible and often dramatic ones taken by institutional entrepreneurs but also include the mundane, hardly visible ones. Therefore, the concept of institutional work claims to have the potential to establish broader vision of agency compared to the concept of institutional entrepreneurship (Lawrence,

Suddaby, and Leca 2011; Lawrence, Suddaby, and Leca 2009; Lawrence and Suddaby 2006). Potentially, institutional work can focus on the actors who are powerless, under-resources while doing important institutional work (Martì & Mair 2009).

Lawrence and Suddaby (2006) identified three key elements of the study of institutional work: 'the awareness, skill and reflexivity of individual and collective actors'; (p.219); 'an understanding of institutions as constituted in the more and less conscious action of individual and collective actors' (p.219); 'we cannot step outside of action as practice – even action which is aimed at changing the institutional order of an organizational field occurs within sets of institutionalised rules' (p. 220). Therefore, institutional work claims a broader scope than institutional entrepreneurship in explaining institutional dynamics.

To develop research on institutional work, scholars have proposed utilising the idea of Bourdieu (Bourdieu 1977; Bourdieu 1984) and Giddens (Giddens 1979; Giddens 1984) to address the interrelationships between individuals and their institutional environments (DiMaggio and Powell 1991; Hirsch and Lounsbury 1997; Oakes, Townley, and Cooper 1998). Both Bourdieu's practice theory and Giddens' structuration theory view agency and structure as linked and dual. This view contributes to overcoming the paradox of embedded agency (Seo & Creed 2002).

Relying on Giddens (1979, 1984) and Bourdieu (1977, 1984) which aim at transcending the agency versus structure dichotomy, and works by Emirbayer (1997) and Emirbayer and Mische (1998), Battilana and D'Aunno (2009) propose a relational approach to conceptualise human agency. They argue that a relational perspective can be applied to organisation studies and to enrich institutional theory. Instead of taking either a deterministic view or a voluntarist view of agency, institutional work should take a practice

perspective which stands on the middle ground between the deterministic view and the voluntarist (heroic) view of agency (Lawrence, Suddaby, and Leca 2009) and conceptualise that individual actors are not only shaped by institutions but also shape those institutions through institutional work (Berger & Luckmann 1967; Battilana & D'aunno 2009; DiMaggio & Powell 1991). Institutional work pays special attention to distinguishing different forms of agency that associate with different forms of institutional work. Battilana and D'Aunno (2009) developed a table that illustrates the dimensions of agency and forms of institutional work. (See figure 3)

	Iterative agency	Practical-evaluative agency	Projective agency
Creating institutions	• Improvising • Modifying	• Translation • Bricolage • Reacting to shocks	• Inventing • Creating proto-institutions • Establishing institutional mechanisms • Advocating diffusion
Maintaining institutions	• Enacting institutionalized practices • Selecting one legitimate, institutionalized practice over another	• Adapting institutionalized practices • Bolstering regulative mechanisms	• Repairing • Defending
Disrupting institutions	• Failing to enact an institutionalized practice • Institutional forgetting	• Avoiding institutional monitoring and sanction • Not selecting institutional practices / selecting others	• Attacking the legitimacy or taken-for-grantedness of an institution • Undermining institutional mechanisms

Figure 3 Dimensions of Agency and Forms of Institutional Work

According to Emirbayer and Mische (1998), agency consists of three dimensions: iteration, projective and practical-evaluative. The iteration dimension is oriented towards the past and involves a low level of conscious reflection. It is 'manifested in actors' abilities to recall, to select, and to appropriately apply the more or less tacit and taken-for-granted schemas of action that they have developed through past interactions' (p. 975). The agency lies in 'how actors selectively recognize, locate, and implement' in their actors (p. 975). The projective dimension of agency is about giving shape and direction to the future. Actors do not only repeat the past, they also invent the future. This involves 'an imaginative engagement of the future' and rises from occasions that cannot be satisfactorily resolved by 'taken-for-granted habits of thought and action' from the past (p. 984). The third dimension of agency is the practical-evaluative dimension. This dimension orients to the present and it describes actors' ability to make judgments and choices in the face of ambiguity, uncertainty and conflicts. 'The problematisation of experience in response to emergent situations thus calls for increasingly reflective and interpretive work on the part of social actors' (p. 994). This dimension focuses on the contextualization of social experience and involves a high level of reflexivity. Although the three dimensions refer to the past, the present and the future, they are not simply constructed on a time sequence. Each dimension of agency has a 'simultaneous internal orientation toward past, future, and the present, for all forms of agency are temporally embedded in the flow of time' (p. 972).

Batttilana and D'Aunno (2009) argue that three dimensions of agency enable three types of institutional work: creating, maintaining and disrupting institutions. (See Figure 4) They argue that this multidimensional view of agency moves the research focus beyond its current emphasis on projective agency associated with creating institutions and disrupting institutions. By adding the iterative and practical-evaluative dimensions, research on

institutional work can potentially open up new sets of research questions. By adopting this multidimensional view of agency, researchers can be more aware of the different level and types of human agency which leads to engagement in different institutional work.

Delbridge and Edwards (2008) suggest that researcher should consider multiple actors at multiple levels and the contradictory and complementary institutional work involved in the institutional processes. Lawrence and colleagues (2011) pointed out that research on institutional theory as a macro-theory of organizations has focused attention on the macro-dynamics of field through large-scale social and economic changes. In contrary, *'how and why actors work to interpret, translate, transpose, edit, and recombine institutions, and how those actions lead to unintended adaptations, mutations and other institutional consequences'* (p. 55) are under-researched. Reay, Golden-Biddle, and Germann (2006) also suggest that individual level of analysis is neglected in institutional work. These are the areas that the following empirical chapters aim to make a contribution to. This thesis uses institutional theory as analytical framework while at the same time being informed by the well-developed group of European critical accounting research.

3.4 Institutional Complexity and Multiplicity

Earlier empirical research on institutional logics covered a great variety of contexts and also contributed and inspired the theoretical development of this perspective. The study of variation instead of homogeneity started in the early 1990s (Oliver 1991; Oliver 1992). Oliver (1991) called for the study of the variation in strategic responses to institutional pressures for both legitimacy and efficiency. In an attempt at bridging the old and new institutionalism, Greenwood and Hinings (1996) highlighted the importance of addressing

interaction and dynamic within the organisations when confronting with changing institutional contexts.

Townley (1997) examined the responses to performance appraisal practice by one group of professionals – academics. Instead of isomorphism, sources of variation in responses were identified. It is found that even when the government successfully introduced the performance appraisal practice across the sector, responses to isomorphic change were driven by institutional logics. Haveman and Rao (1997) investigated the interplay between organisations and institutions in the thrift industry during changing technical environment and institutional environment. It is found that novel institutional logic was difficult to adopt due to institutional conflicts. Thornton and Ocasio (1999) revealed the role of the industry level logics in the succession of the executives in the higher education publishing industry. Editorial logic which characterised the 1950s and 1960s in this industry shifted to market logic in the 1970s. This change in the collective identity shaped the succession of executives. Thornton and Occasion (1999), echoing Haveman and Rao (1997), identified a number of factors that contributed to the change in dominant logics in the field – competition, political processes, social networks, changing views of legitimacy and new technologies. In the subsequent study of the same empirical context, Thornton (2001) identified two forms of capitalism – personal and market which denote the two institutional logics – editorial logic and market logic. This change of dominant logic influences decision making on acquisitions. Thornton (2002) further developed this theory by looking at the rise of the multidivisional corporate structure in the same industry. The change in corporate structure can be explained by the strategic and structural conformity with the dominant institutional logic. These empirical studies all focus on the decision makers and how they deal with the conflicting and changing institutional logics. The argument here is institutional logics focus attention of the

decision makers on issues that are prevalent. The available set of solutions is determined by their appropriateness and legitimacy in the institutional environment characterised by the institutional logics in the arena.

Lounsbury (2001) set out to investigate the answer to the question raised by previous research on institutional logics - why organisational responses to institutional pressures differ (Friedland & Alford 1991; Oliver 1991)? He was concerned with how the societal level and school-level processes shaped the dynamic of adoption practices. Instead of finding isomorphism (DiMaggio & Powell 1983) in the diffusion process of the recycling programs conducted by university staff, it was found that systematic variation existed in the individual responses to the program which can be explained via connections to field level organisations. In another well cited article around the same time, Lounsbury (2002) showed how transformation of dominant institutional logic in a field guided the professionalization of a profession. Drawing on historical analysis of the field of finance in the US, he highlighted the processes of the dismantling of the old logic (regulatory logic) and the building up of a new one (market logic). He related this to the increase in professional status of the financial occupation. Up until this point, most research in this area focus on two logics, one replacing the other in the field and the consequences of this replacement.

In a detailed account of healthcare organisations in the San Francisco Bay Area since the World War II, Scott et al. (2000) addressed the nature and causes of profound the institutional changes in the healthcare sector. Using multiple research methods (quantitative and qualitative), data sources (archives, interviews, reports, periodicals, websites, etc.) as well as theoretical perspectives, the authors identified three institutional eras: professional dominance (1945-1965), federal involvement (1966-1982) and managerial/market mechanisms (1983-present). It is argued that changes in ideologies came first because changes in structures require build-up of

institutional pressures. Even with the managerial/market logic coming into the healthcare sector, the other two contending logics (professional dominance and legislation) did not disappear. This is one of the early accounts of institutional pluralism, and institutional complexity. Healthcare organisations, like hospitals, often bring different professions together, each with their own normative and cognitive prescriptions. For example, surgeons, nurses and HR managers all have their own professional conducts and embedded in different logics of action. How do the organisations reconcile these conflicts and tensions result from the co-existence of multiple logics? This question has attracted considerable academic interests over the last decade. Lounsbury (2007) noted that, although the link between institutional logics and practices was well established, most research had focused on how practices and fields were structured around one 'dominant logic'. As Friedland and Alford (1991) discussed, the idea that in their seminal article that organisational fields are always subject to multiple logics. Unlike institutional processes in environments where a single dominant logic exerts isomorphic pressures, organisations find themselves in pluralistic environment often requires compromises and negotiations. This empirical puzzle sometimes is referred to as 'institutional pluralism' (Kraatz & Block 2008; Jarzabkowski 2009; Yu 2013) or 'institutional complexity' (Greenwood et al. 2010).

Kraatz and Block (2008) define 'institutional pluralism' as 'the situation faced by an organization that operates within multiple institutional spheres' (p.243). Greenwood and colleagues (2010) introduced the concept of 'institutional complexity' and propose that 'less prevalent logics might have only a localized or weak influence, but in any field or industry, practices prescribed by different logics will be in play' (Greenwood et al., 2010; p. 522). Greenwood et al. (2011) define institutional complexity as 'incompatible

prescriptions from multiple institutional logics' (p 318) and provide an analytical framework to guide future research effort. (See figure 4)
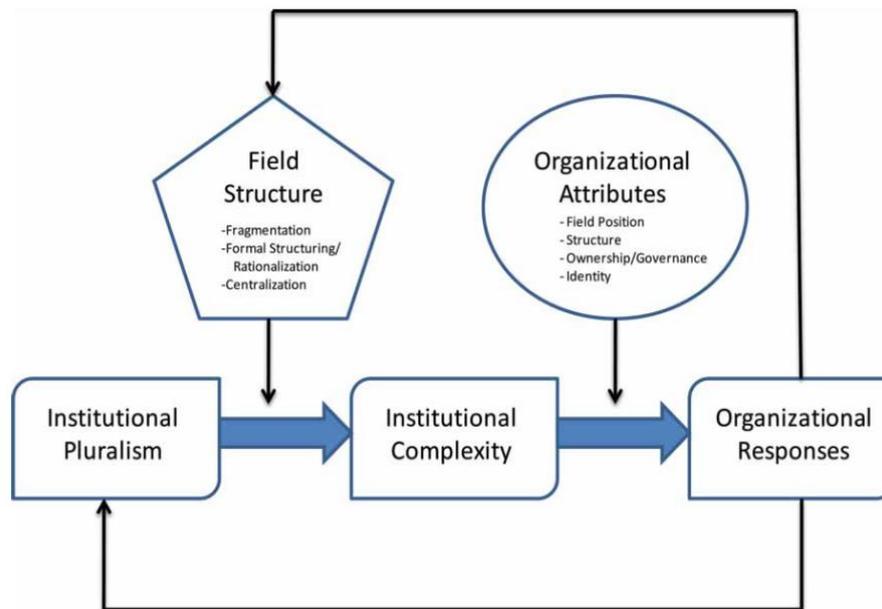
Figure 4 Institutional Complexity and Organisational Responses

Researchers approach the puzzle of institutional complexity from different empirical settings, different levels of analysis, using different methods. Although it is now acknowledged that multiple logics exist across a wide range of organisations, research offers mixed and sometimes divergent findings on the consequences of logic multiplicity. The research up to now has validated three propositions. First, practices are shaped by institutional logics (Thornton & Ocasio 1999; Haveman & Rao 1997; Lounsbury 2007; Lounsbury 2002). Second, institutional logics are historically contingent (Thornton 2002; Thornton 2004; Scott et al. 2000). Third, organisations often face complex institutional arrangements which prescribe sometimes incompatible principles when interpreting social situations (Dunn & Jones 2010; Greenwood et al. 2010; Greenwood et al. 2011; Pache & Santos 2010; Purdy & Gray 2009; Reay & Hinings 2009).

More recent studies have focused on the consequences of institutional pluralism and complexity. However, the findings are mixed. Some show conflict and contestation between different logics (J. Battilana & Dorado 2010; Reay & Hinings 2005; Dunn & Jones 2010), some show coexistence (McPherson & Sauder 2013a) and blending (Binder 2007), some studies find institutional pluralism and complexity a threat to organisational performance (Tracey et al. 2011), some argue that this multiplicity can make organisations more innovative, sustainable and enduring (Kraatz & Block 2008; Jay 2012) and some suggest that this multiplicity is facilitated by the field level transition (Haveman & Rao 1997) while others suggest that institutional pluralism causes the field to have institutional multiplicity (Reay & Hinings 2009).

So far empirical research offers little explanation on how and why multiple logics have mixed organisational consequences and under what condition these different outcomes arise. Yu (2013) suggests that intra-organisational politics is a generative process through which organisations adapt to change. Besharov and Smith (2014) argue that understanding how multiple institutional logics manifest within organisations can have significant implications for predicting consequences of institutional pluralism and complexity. This is one major research question that this thesis is strived to contribute.

Accounting plays an important role in organisations, institutions as well as the society (Chapman et al., 2009b; Miller & Napier, 1993; Miller, 1990; Rose & Miller, 1992; Weber, 1904). Miller and Power (2013) identified accounting as possibly 'the most powerful system of representation of social and economic life that exists today' and 'has achieved a dominant role in contemporary society' (p. 563). As one of the most important aspect of organisational life, beneath the technical surface, accounting is argued to be 'profoundly institutional' (Miller & Power, 2013 p. 561).

Accounting as 'rationalised myth' has attracted scholarly attention from outside the accounting research communities (e.g. Meyer and Rowan, 1977). The institutionalisation of rationalised myths has been documented in accounting research inspired by the development of neo institutional theory that practices such as accounting, performance measurement and auditing appear to be decoupled or loosely coupled to real organisational activities as a means of legitimacy seeking (Bromley & Powell 2012; Modell 2004; Power 1994; Power 2004).

Institutions are social-cultural structures which facilitate cognition of individuals and shape their behaviour (Scott 2013; Lounsbury 2008). Institutional dynamics, conceptualised as the generative of interests, values, norms and identities, affect human behaviour and therefore affect accounting practices (Ezzamel et al. 2012; Lounsbury 2008). Although the focus of institutional studies has moved away from the distinction between instrumental and the institutional rationality to a more collective or institutional notion of rationality (Marquis & Lounsbury 2007; Lounsbury 2007), from isomorphism, symbolic conformity and homogeneity to heterogeneity and practice variation in recent years, we still struggle to explain the reasons and causes behind institutional changes and institutional sources of practice variation (Lounsbury 2008; Lounsbury 2007; Ezzamel et al. 2012).

Nevertheless, the emergence of the concept of institutional logic has proved to be powerful in helping the further development of institutional theory (Friedland and Alford, 1991; Thornton and Ocasio, 2008a; Thornton, 2004; Thornton et al., 2012). Institutional logics are defined at a societal level, as 'a set of material practices and symbolic constructions – which constitutes its organizing principles and which is available to organizations and individuals to elaborate. (p. 248)' Thus, logics are constructed and reproduced in sectors

of society, once taken of granted, will prescribe meanings, identity for organisations and individuals.

A fair amount of research on institutional logics have since taken a historical perspective, focusing on the shifts of macro logics on field level (Haveman & Rao 1997; Scott et al. 2000; Lounsbury 2002; Thornton 2004; Thornton & Ocasio 1999). Many studies conceptualise organisations as unified entities which respond to multiple and sometimes conflicting field-level institutional demands and transit from one logic to another (Reay & Hinings 2009; Dunn & Jones 2010). In these studies, field-level mechanisms are the most important forces in selecting and enforcing logics. However, little attention has been paid to how individual organisations experience institutional multiplicity and how multiple logics are represented and enacted in intra-organisational dynamics.

Three recent shifts in theoretical development can be identified as attempts to address the above issue: a more micro perspective in empirical research, the acknowledgement of institutional multiplicity and the view of institutions as inherent and constitutive. Firstly, a shift of attention is called for, from macro structures to micro-processes to help unpack and demonstrate the institutional dynamics of practices (Zilber 2011; Lawrence et al. 2009; Lawrence et al. 2011; Reay & Hinings 2009). This approach can shed light on how and where new accounting practices originate and how and why they come to stay (Lounsbury 2007; Lounsbury 2008). This goes hand in hand with the second recent theoretical development - institutional multiplicity. Kerr (1963) observed that university is 'so many different things to so many different people that it must, of necessity, be partially at war with itself' (p. 8) that it is becoming 'multiversity' – an ideal example of an institutional pluralistic organisation. Similarly, Cyert and March (1963) also argue that organisations are coalitions of individuals with different, sometimes incompatible goals. The multiple identities, logics represented by

organisational members have now been acknowledged by institutionalists as common across various organisational settings (e.g. Dunn & Jones, 2010; Glynn & Lounsbury, 2005; Greenwood, Díaz, Li, & Lorente, 2010). Kraatz & Block (2008) define this as 'the situation faced by an organisation that operates within multiple institutional spheres' (p. 243) Such an organisation are embedded in multiple normative orders and cultural logics and have multiple mind-sets, practices and processes (Kraatz & Block 2008; Kraatz 2009; Greenwood et al. 2011).

Thirdly, in the earlier studies, multiple institutional demands are seen as being imposed on organisations and organisations were conceptualised as unitary actors, passively responding (DiMaggio & Powell 1983) to, or actively resisting (Oliver 1991), to external institutional demands. Later studies moved away from this conceptualisation, rather, institutional effects are seen as constitutive to the organisation, and as passing through the organisations rather than merely being impinged on them (Kraatz & Block 2008). It is argued that organisations to be conceptualised as pluralist and complex entities and institutional multiplicity to be conceptualised inherent to them (Barley & Tolbert 1997; Greenwood & Hinings 1996). This conceptualisation echoes Hopwood's earlier call for accounting studies that:

> *It might even be useful to see the social as passing through*
> *the organizational, with both wider and more localised*
> *concerns calling upon practices such as accounting to create*
> *an ambiguous but nevertheless tethered conception of reality.*
> *– (Hopwood, 1983 p.302)*

Based on these theoretical developments, more recent studies have investigated the consequences of institutional multiplicity. These consequences include contestation and conflict (J. Battilana & Dorado 2010), coexistence (McPherson & Sauder 2013a), logic blending (Binder 2007), performance threatening (Tracey et al. 2011), paralysis or breakup (Pache & Santos 2010) and endurance and innovation (Jay 2012). These studies focus

on how organisations deal with institutional multiplicity. However, *we* know little about how multiple institutions affect accounting practices, we know even less about how accounting affects institutional multiplicity (Ezzamel et al. 2012). As the relationship between accounting and institutions becomes increasingly recognised, more research on the concepts, and rationales such as accountability, efficiency which demand the increasing use of accounting is needed (Bozanic et al. 2012).

This research responds to the above call for research. To translate the governmental objectives, and aspirations of 'value for money', efficiency, accountability and transparency, the organisation took up performance management techniques. This research adds to our understanding of the role of accounting in managing the relationship between professional logics and the governance (state) logic. This research also highlights how accounting practices are perceived by professionals at different stages of implementation. This research is also concerned with the impossible apolitical use of accounting techniques.

The research site of the study is located in the public sector landscape. The major regulation influence has been the requirements of using performance management techniques from Scottish Ministers since 1980s and the introduction of the National Performance Framework in 2007 by the Scottish Governments. We examine the professionals' reaction to, and interpretation of, the increasing use of performance management techniques over the time spanning over two decades. We also aim to explore the unintended consequences of the implementation of accounting techniques and the relevant implications on the institutional multiplicity of the organisations.

3.5 Enriching Macro Institutional Logics Perspective with Bourdieu's 'Field'

During the early stage of fieldwork, it was found that scientific and cultural organisations are comprised of groups of professionals who are 'embedded' in different institutional logics. This creates institutional complexity, which shape organisational practices including management accounting practice (Kodeih & Greenwood 2013). However, previous management accounting research informed by NIS often conceptualise macro institutional context in terms of different factors on different levels (such as 'the economic' and 'the political' factors on 'national level' and 'international level') which are translated into practices on the 'organisational level' (such as Dillard et al. 2004; Hopper & Major 2007).

Dillard et al. (2004) state that the widely taken-for-granted norms and practices at the macro societal level are translated into field expectations, which act as a broad range of criteria for organisational level action. Following this line of conceptualisation, Hopper and Major (2007) position their case organisation in the macro context, mainly EU level and National Level agents.

Their model, though effective in teasing out the field level power relations, is inadequate for this study. First, this conceptualisation treats agents (such as government, consultants, competitors) as components of the institutional environment and sources of influence, however it does not explicitly define the different sets of taken-for-granted norms and values (institutional logics), which drive the agents' actions. Second, it does not take into account of different professional values in shaping different practices. When studying management accounting practice in the context of scientific and cultural organisations, other professional practices (such as research, education, etc.) play an important part. Third, this model assumes that organisations are

institutionally homogeneous and experiences institutional factors evenly across all parts of the organisation. This does not apply to the empirical context in this thesis. Different parts of the organisations react and interpret the management accounting practices differently.

One important character of the scientific and cultural organisations is the fragmentation and the co-existence of multiple professional groups. Therefore, to help teasing out the institutional complexity, Bourdieu's concept of 'field' and his study on field of cultural production is employed to enrich the institutional logics perspective (Bourdieu 1993).

Institutional logics perspective (ILP) has proven to be useful in accounting for plurality of norms and beliefs which could provide plausible explanations for institutional conflicts and changes (Cloutier & Langley 2013). Conceptualising the institutions of modern western societies as a set of contending institutional orders (detailed discussion see section 4.3.1), each institutional order prescribes different practices and beliefs (Thornton & Ocasio 2008; Thornton et al. 2012).

However, institutional logics perspective does not tend to how these high-order institutional logics co-exist with each other in specific fields and how fields are different due to their relative power and resources. For example, the field of art galleries and the field of accountancy firms are both incorporating professional logics and to some extent, market logics. However, the field of art has higher autonomy intrinsically to define their own performance criteria compared to that of the accountancy firms. This insight was addressed in Bourdieu's study of the field of cultural productions (Bourdieu 1993). It is highly relevant to the empirical context examined in this thesis, as scientific and cultural organisations differ from other organisations in primarily two dimensions: institutional context, organisational settings.

Firstly, scientific and cultural organisations have complex institutional contexts by being embedded in multiple institutional fields. They incorporate both contexts of production fields as well as services fields. In the fields of production, manages face clearly defined provider-purchaser relations (such as that of the operation of botanical gift shops). In the fields of service, managers face less controllable environments (such as that of the provision of botany lessons). This distinction has direct impact on the performance measurement practice in such organisations.

Secondly, scientific and cultural organisations have complex subgroups with distinct identities, routines, values and loyalties. For example, scientists publish and socialise with other scientists from different institutes but they share identity, routines and values. Just like medical professionals who work between different organisations who are loyal to the profession but no so much to a specific hospital. This type of subgroups therefore in theory, is less likely to be affected by management accounting practices such as performance measurement. In scientific and cultural organisations, subgroups such as scientists, artists are different from the visitor welcome team or the finance or HR teams. This creates further complexity for analysing new management accounting practices in such context.

Since DiMaggio and Powell (1983), institutional field has been a centre concept of new institutional approach. The classic paper argues that a set of organisations, once emerged as a 'field' will become more similar over time due to the structuration (Giddens 1979) of the fields. Here the 'field' is conceptualised as a level of analysis between the societal level and the organisational level. As Friedland and Alford, (1991. p.65) note that those organizations that, in the aggregate, constitute a recognized area of institutional life: key suppliers, resource and product consumers, regulatory agencies, and other organizations that produce similar services or products' can be regarded as a field. Field conditions heavily influence organisations'

choices and actions. Organisations in one field also influence each other and this contributes to the diffusion of certain practice. Hence, the three types of isomorphic processes – coercive, mimetic and normative – which lead to homogeneity (DiMaggio and Powell 1983). However, how fields differ from each other regarding the allocation of power is the crucial theoretical crux. Because of this, we have to turn to Bourdieu.

According to Bourdieu (1993), some fields have more autonomy in defining their own performance criteria. In Bourdieu's study, organisations in such fields of production compete for cultural legitimacy and the more power one field has, the greater monopoly they have over the production and interpretation of certain symbolic goods.

For Bourdieu, society contains multiple and interlinking fields. Each field is relatively autonomous and has its own 'fundamental laws'. However, different fields have different level of 'openness', which is the degree to which organisations in the field are prone to external institutional influences (Bourdieu 1993). For example, in his research, Bourdieu remarks the field of high art as 'art for art's sake' and it operates mostly internally oriented, subjects to its internal rules. The 'fundamental laws' resemble the institutional orders (religion, family, state, market, profession, corporation, community) in institutional logics perspective (Thornton et al. 2012). Bourdieu's work is also recognised as 'important precursor' in the institutional logics perspective. It offers a fresh perspective into the studies of conflict between different institutional logics (Townley 2014).

For Bourdieu, field is in constant flux and a source for dynamism. Being inherently dynamic, fields are always contested and open to change, therefore, giving rise to institutional change. This has important implication on institutional theory research. Given the recent calls for bringing dynamism back into institutional research, Bourdieu's concepts provide

helpful insights into agency, politics and interests and great potential for improving institutional analysis (Emirbayer & Johnson 2008).

Bourdieu's concept of field is one of the trio concepts (field, capital, and habitus) that make up Bourdieu's thinking tool. Bourdieu summarises the relation of the three elements in one equation:

$$[(Habitus) (capital)] + Field = practice$$

Habitus is one's disposition, the tendency to act. This is Bourdieu's take on the dichotomies of social structure and human agency. Capital represents the position one occupies in the field. And on top of this, there is the current arena of play that is the field. Thus, practices are interpreted as a result of all these elements combined. In other words, in order to understand the 'logic of action' we need to address not only the evolving field, but also the changing habitus and capital.

In Oakes et al. (1998), the authors examined the museums in Alberta, and analysed the changes in how the professionals understand their work through the use of business planning. In this process, the capital of the field changed and so was the identity of the professionals.

Over the recent three decades, research in institutional multiplicity has furthered our understanding on organisational forms and their links with organisational identity and institutional logics. Due to the unique nature of the research site and research question proposed, Bourdieu's concept of field and his study on the field of restricted cultural production provide helpful lens for the exploration of the use of performance measurement in the scientific and cultural organisations.

3.6 Enriching Micro Foundations of Institutional Lens with Group –Level Psychoanalysis

Institutional logics perspective requires further development regarding its micro foundation (Thornton et al. 2012). Since most studies focus on either field level or organisational levels (Battilana & D'aunno 2009; Leca et al. 2008), little is known about how individuals experience institutions (Voronov & Vince 2012).

As Seo and Creed (2002) suggested agency should be conceptualised beyond just cognitive. This investment in certain institutional orders can be both cognitive and emotional. Continued emotional and cognitive investment in an institutional order can maintain an institutional order and disinvestment can lead to disruption and institutional change. Cognitive disinvestment have been highlighted in the institutional entrepreneurship literature reviewed above, factors such as social position, experience and scarce resources could lead to institutional changes. But also, an important yet previously ignored dimension is also contributing to institutional changes – emotions.

The world of formal organisations and the studies on such structures have been informed by theories based on rational assumptions that human beings always maximise their economic benefit. However, gradually, research has acknowledged the emotional, irrational aspects of human agency as well as that of organisations. And this unconscious emotional aspect is the concern of psychoanalysis. Such studies build on the recognition that people in and out of organisations are emotional, sexual beings who fulfil their deeper unconscious desires through work and socialising at work places. Organisations are the sites where the broader social and cultural dynamics are enacted. The psychostructures of organisations include leadership, communications, group relations, etc. And organisations offer defences

against anxieties that individuals have and on the contrary, may lead individuals to anxiety when group dynamics change. And what's more, organisations are sites where collective visions are realised. This can boost members' sense of self-esteem and might also lead to power and glamour. Such as the theory of organisational ideal elaborated by Schwartz (1992) that idealised image of an organisations with desirable qualities can become part of members' ego ideal and enhance their own sense of achievement and worth which can enable 'irrational' behaviours such as dedication, tolerance and even sacrifices. Such insights can potentially enrich organisational studies as well as accounting study like this one, which is informed by organisational theories.

Groups are important as they can have a motivating, inspiring influence on individuals. Groups can also cause suffering and despair on individuals (Swogger Jr 1993). And as we know most work in organisations takes place in groups, how individuals experience group life and how group dynamics influence individuals are important in understanding the emotional aspects of institutional changes. Psychoanalysis contributes to our understanding of complex emotional forces which shape group life, the unconscious wishes and desires, the delicate networks among members, etc. And current group dynamic theory is highly indebted to the work of Wilfred Bion (Hampton 1999). Bion, a practising psychoanalyst in an army hospital developed a theory of group behaviour. Rather than treating individual patient, he directed his therapy to the group as a whole. Bion's pioneered the group analysis and was furthered by Tavistock Institute in London.

Accounting research has touched upon group dynamics and shed light on the phenomenon that professionals (such as GPs and teachers) have formed absorption groups to resist the ideology of new public management (Broadbent & Laughlin 1998). Broadbent and Laughlin (1998) employed the psychoanalytic study of group dynamics by Bion from the 1960s.

In his book, Bion (1961) identified three basic assumptions if anyone of the three is held by the group at a given time can make the group unproductive and could lead to stagnation and regression. When a group is holding the basic assumptions at any given time, it seems as if the group is closed off and is out of touch with reality. In contrast, a work group is a functioning group, which does real work. In a work group, members are aware that they need to develop their skill sot work together and the group operates as an open system, which is in constant touch with reality. A work group can be in 'basic assumption' mode, namely, they come together for dependency (baD), for pairing (baP) or for fight or flight (baF).

Basic assumption dependency (baD): If a group behaves as if the group is sustained by a leader whom seem omnipotent and omniscient then the rest of the members have a tendency to contribute less than they are supposed to. Basic assumption pairing (baP) is characterised by hope. It is by establishing empty hope that the future will be better than today and then only be followed by disappointment. This basic assumption is a defensive mechanism so that the group is out of contact with reality. Basic assumption fight or flight (baF) means that when a group is in distress the members will do either indifferently. If the group is pre-occupied by this basic assumption then no other activities can carry on.

Working organisations can often be seen as a work group which, according to Bion, refers to a certain mentality of the group members. For a group to be a work group, members need to cooperate and communicate and make an explicit effort. Unlike basic assumption group, work group is beyond the primitive emotional level and requires rational and scientific methods in its approach. Therefore, constant and effective communication is required and members of the group need to control their frustrations and emotions to ensure the objectives of the organisation can be achieved.

However, basic assumption mentality and work group mentality always coexist. The permanent conflict recurs and disrupts group activities. To deal with such disruption, specialist work groups are created to deal with various basic assumption mentalities. This is also the focus of Broadbent & Laughlin (1998) that organisations establish this type of groups to absorb or fend off unwanted intrusion, such as imposed new accounting techniques as manifest of public sector reforms. Examples given by Bion in real life for this type of groups are for example, the existence of army is to deal with the basic assumption fight or flight group of a country to keep the rest of the country more like a work group. The existence of the church is concerned with the basic assumption of dependency that when people are in distress and in need of a spiritual leader. This theory, although derived from psychoanalysis, was attempted to be applied in general (Board 1978).

In Broadbent and Laughlin's study, this type of absorption groups acted like buffer shielding off the intrusion while retaining the core practice intact. However, not all intrusions can be fended off or absorbed therefore, some intrusions can potentially penetrate and colonise the organisation in certain ways. The 'specialist work group' designed to absorb the intrusive changes turned out to actively pursue fundamental changes which made them 'colonisers' rather than 'absorbers'(Broadbent & Laughlin, 1998; p. 430)..

The specialized work groups provide a new way of conceptualising work unit in organisations with does not contribute directly to the strategic objectives of the organisations. They are likely to sit at the intersection of different logics. Having access to different fields, they are positioned in an advantageous location with the potential to initiate and contribute to institutional changes. Broadbent and Laughlin (1998) pioneered the use of the concept 'specialist work group' in analysing new public sector reforms. They found that colonising effect is taking place in GP practices and schools. The attitude of GPs and head teachers towards the changes is overwhelming

negative. Meanwhile, the power of accounting practices as an alternative rationality to professional logic was not taken into account. However, a psychoanalysis perspective can enrich institutional perspective regarding its micro foundations. The institutional perspective put its emphasis on cognitive and conscious aspects of agency; however, psychoanalysis focuses on the emotional and often unconscious side as causes for human behaviour, in this case, group dynamics.

Offering a new mechanism of institutional change by adding an emotional dimension to the model, Voronov and Vince (2012) proposed that emotional processes are overlooked in the analysis of institutional change, especially they contribute to the investment and divestment of emotions which lead to the maintenance, disruption and creation of institutions. Linking the work of Bion's psychoanalysis and basic assumptions with institutional work and institutional changes, could provide another angle by looking at the intersection of institutional logics. Individuals or groups who have access to multiple institutional fields are equipped with the potential of becoming institutional entrepreneurs. And in some cases, they can initiate and contribute to institutional changes intentionally and unintentionally.

Voronov and Vince (2012) argue that emotional dimension is neglected in the micro foundation of institutional theory and emotions can have significant influence on institutional change through the mechanisms of institutional work. Informed by psychoanalysis, in particular, theory on group behaviour by Bion (1961) on the unconscious and emotional process intra-group emotional dynamics can enrich our understanding of micro foundation of institutional theory. Taking into account the input of the emotional processes could potentially enrich the concept of agency (Voronov & Vince 2012).

Previous work on institutional theory and institutional change emphasises on the cognitive side of human agency while overlooking the emotional

dimension. By incorporate emotions into the model of institutional change provides a new way of conceptualising institutions and the dynamics. Also, group dynamics and emotions can be the important step missing in between the field level and the individual level analysis. Voronov and Vince (2012) introduced a model which incorporates emotions into the individual level analysis which links to institutional change through institutional work (see figure 5).

Figure 5 Relational Analysis of Emotions, Cognition and Domination in the Context of Institutional Work

3.7 The Integrated Theoretical Framework

Institutional theory has been under continuous evolution in the past three decades gaining sophistication (Cloutier & Langley 2013). It started its journey from a predominant focus on legitimacy, isomorphism and decoupling to a detailed cross-level theoretical framework which addresses concepts such as institutional multiplicity and complexity (Cloutier & Langley 2013).

Institutional theory has moved from focusing on the conforming to external requirements to a more fluid conception of institution (Thornton, Ocasio, and Lounsbury 2012). The much discussed embedded agency problem has led to a further shift of institutional theory from a rigid view of agency to a more recursive view that while institutions shape human behaviour, they are also products of human actions (Thornton et al. 2012).

However, Thornton et al. (2012) calls for further research to enrich the institutional logics perspective with inputs to both the macro level and the micro level. This thesis aims to do so by employing Bourdieu's concept of field at the macro level to bring the fluidity to the current rigid conceptualisation of institutional logic. And by employing concepts from psychoanalysis, especially Bion's work on group dynamics, this thesis aims to enrich the micro foundations of institutional thinking with emotional and unconscious process which was previously neglected in institutional research (Croft et al. 2014; Voronov & Vince 2012). With the input from Bourdieu's concept of field and group dynamics and emotion from psychoanalysis, this thesis aims at developing an integrated cross-level theoretical framework which can inform the analysis of the empirics to answer the research questions.

CHAPTER 4. RESEARCH METHODOLOGY

Having outlined the interpretive management accounting research and institutional theoretical framework that inform this research, this section outlines the methodology and research methods adopted. I begin with an overview of the research design and justification for choosing such a design before outlining how the data was collected, analysed and theorised. This chapter lays out the methodological foundation for the following chapters with document the research findings arising from such research methodology.

4.1 Overview of Research Design

This thesis is motivated by the rare opportunity to study one scientific organisation in depth longitudinally regarding their management accounting practices and use of performance management techniques, and the fields that the organisation is embedded in. Apart from access to the case organisation, the researcher was granted opportunities to visit and interview other organisations in the same field. This level of access has provided a unique opportunity to study the micro dynamics of longitudinal management accounting change as well as the macro environment and context that shape the change processes.

The research project was originally designed to be a single in-depth longitudinal case study in one of the world leading scientific botanic garden focusing on the micro dynamic of accounting change. Serendipity has played a part in expanding the research design to incorporate a field survey. At the end of 2012, when the participatory observation was finished at that stage in

the case organization, it was discovered that in order to develop a better understanding of the case organisations, the macro context of the case organisation needs to be better conceptualised, especially the institutional complexity which shapes the change process.

The opportunity to expand the research design presented itself in November 2013 when the researcher was invited to attend a workshop hosted by the case organisation with participants from the Scottish Government, the National Library of Scotland, the National Galleries of Scotland, the Scottish Environmental Protective Agency, the Scottish National Heritage, the Crofting Commission, the Royal Commission on the Ancient and Historical Monuments of Scotland (merging with Historic Scotland during the research process), and Ordnance Survey Ireland. The agenda of the day was to share experience on management accounting issues such as performance measurement. Despite the fact that some attendees had travelled hours on the train or flying in from Ireland, the atmosphere was informal and engaging. The researcher was able to communicate with the representatives from the participating organisations in both formal and informal settings.

During the workshop, it was clear that other scientific and cultural organisations in the field of the case organisation were clearly influenced by the management accounting practices developed and implemented in the RBGE. But how and why were intriguingly unclear. Some of them were keen to 'have something similar' in the area of performance management. The key field level authority – Scottish Government – recognised the management accounting practices in the Royal Botanic Garden Edinburgh as superior and encouraged the development of similar practices in other participating organizations. And other actors in the field responded to this field dynamics in various ways. Some attendees provided some fascinating insights to the researcher and others expressed some concerns during casual conversations held during the breaks. There and then, I decided to broaden the scope of the

empirical investigation and include some other scientific and cultural organisations and their performance management practices.

As a result, following the workshop, several organisations were surveyed: National Library of Scotland, National Galleries of Scotland, National Museums of Scotland, Scottish Environmental Protective Agency, Scottish National Heritage, Historic Scotland, and a comparative organisation Crofting Commission. The main reasons are as follows: these organisations are mainly made up of professional with a strong professional logic (may it be botanical sciences, horticulture, environmental sciences, library management, natural and art history, etc.) except the Crofting Commission (a small organisation which reviews crofting applications). These organisations also serving public needs by providing a range of services (such as visitor attraction, education, etc.), which subject them to work under the pressure of being 'cost-effective' and 'efficient'. At the same time, they are all required by the Scottish Government to adopt performance management techniques and provide better public engagement, which is source for political pressure. Such complex institutional environment shared by the case organisation as well as the additional organisations surveyed later in the research process made it possible to ask more research questions and to provide satisfactory answers to these questions.

Several key research questions were identified and added to the research design. The research questions guided the research process were:

1. What are the multiple institutional logics at play in the field of scientific and cultural organisations? And what are the different fields these organisations are embedded in?

 2. How do scientific and cultural organisations cope and respond to the multiple institutional demands?

3. How do management accounting practices shape the field and alter the dynamics of the multiple institutional logics?

4. How do the multiple institutional logics shape management accounting change processes?

5. What is the role of emotion and unconscious processes in management accounting and institutional changes?

6. What is the role of visual elements in institutional processes?

The research design includes two main components: a case study and a field survey. The case study approach was adopted for the main case organisation – the Royal Botanic Garden Edinburgh. Although two different approaches were adopted in data collection, the data analysis was conducted in an inductive and integrated way. The analysis and findings of the case study and the field survey inform each other and validate each other. It is an iterative process going back and forth between the two components of the empirical study. The two components tell one story and paint one picture of the performance management practices in the scientific and cultural organisations in the Scottish public sector.

In the next section, I first describe the case study approach adopted and the subsequent field survey conducted before I describe how data was collected, analysed and theorised.

4.2 Case Study Approach

With the acknowledgement of factors such as power and institutions as critical to individual and group behaviour and the change processes, this thesis parts its way with positivist and functional view of practices, and takes up a social constructionist position. Such a position is not interested in

predicting the future or testing hypothesis, it is interested in documenting how certain ideology and meanings have become taken-for-granted and thus shape practice (Trevor Hopper & Powell 1985). In addition to the basic assumption that organisational world is socially constructed (the ontology), this thesis assumes that people constructing their organisational realities are knowledgeable agents and they can explain their thoughts, intentions and actions. The researcher takes on the role of giving an adequate account of the people's experiences (Gioia et al. 2012).

This research is interested in how people interpret and perceive certain management accounting practices and changes in the broader institutional environment. The focus on meaning and interpretation lends the research to a qualitative approach. To gain detailed and in-depth understanding, a longitudinal case study was conducted and observation and interviews were chosen to be the most appropriate methods since they allow detailed and in-depth investigation of the phenomenon at hand and allow interaction with actors in the field to gain understanding about how and with what effect, management accounting practices, such as performance management techniques have, in their respective social and institutional context (Bryman & Bell 2011).

It is the researcher's responsibility to be reflexive and to be explicit on his or her research approach and designs. Also, the research approach and designs, to a large extend influence the research content. Claiming an inductive qualitative research approach always elicits post hoc rationalisation of a probably somewhat accidental decision. By approaching data with loose, multiple potential theoretical framing possibilities, the researcher is able to identify a suitable theory (Otley & Berry 1994). Therefore, the researcher did not go into the field with a pre-set idea of what theory to use to frame the findings. In line with the social constructivist approach, this approach allows the exploration of the social, the societal and the political in management

accounting (Burns & Vaivio 2001) and perhaps this is why case studies have become the dominant approach in the interpretive management accounting research (Baxter & Chua 2003).

Data analysis and theorisation was conducted in a highly iterative way which seeks to develop existing theory. By systematically coding, identifying emerging themes and theorising, data was allowed to 'speak for itself'.

Although not intended as a piece of ethnographical research, this project resembles in many ways and takes inspiration from it in many respects. For example, observation and experiential data play an important part in the analysis. The researcher participated in the field for a prolonged period of time. Different from the typical research participant in most ethnographical studies, my initial involvement in the field (from August 2010 to August 2012) could be labelled as 'total participant' when I was first and foremost a participant, an employee. The position as a total-participant is often criticised about the risk of developing too much intimacy with a field and lose objectivity, which is crucial to scientific inquiry. However, as a newly graduate student from China being employed into an institution with mainly Scottish and middle aged employees, I was never really an 'insider'. Significant cultural gap existed between the researcher and the organisation which presented enough trust from the other employees to behave and express to the researcher, but also grant the researcher enough independence and detachment from the 'happenings'. The researcher's appointed job position was not located in any department; rather, working as an assistant to the director of corporate services division directly, the researcher was not part of any professional 'clan' in the organisation. This has allowed objectivity as an outsider and to observe the process unfolding in different divisions and among different groups of actors.

One important source of research motivation comes from the discrepancies observed during the two year's participation period, between the kind of accounting practices in accounting textbooks and the kind observed in real life, especially how the explanation for such discrepancies lie beyond the technical, reaching into the social, the political and the institutional. This unique job experience provided the research with a unique opportunity and access to conduct an in-depth case study of management accounting changes in the organisation on a micro level as well as the field on a macro level. To validate the observation, interviews were conducted and documents were collected.

The research process is inductive, interpretive, iterative and theoretically informed. I use inductive and embedded longitudinal case study with multiple data sources for my main case study.

With the ethical approval from the university as well as case organisations, first stage data collection was conducted in the Royal Botanic Garden (RBGE), an 80% government funded body (the rest comes from research grants, capital grants and self-generated income), is a public sector organization with a highly qualified staff in four divisions (Science, Horticulture, Corporate Services and Enterprise) contributing to multiple strategic objectives (e.g. research, education, conservation, visitor management, income generation, etc.). It has four regional gardens across Scotland with over 800,000 visitors each year. The RBGE holds one of the richest living collections of plant species in the world. It is a world-renowned centre for botanic science with the world's largest research groups of plan taxonomists and the widest botanic education programs.

RBGE has roughly 200 staff from a variety of disciplines, contributing to its strategic objectives and functions. The researcher was employed in a junior position in the Corporate Services division for two years from 2010 to 2012.

Participative observation was conducted during this period. Taking advantage of the position, the researcher was able to observe other employees' interaction with the new management accounting practice, the daily individual activities (report generation), weekly and monthly collective activities (formal meetings and informal discussions). Notes were taken during the process. Because of this experience, rapport was built with staff members in all four divisions. This has led to full access to the case organization even after the researcher had left the organization. Interviews were conducted from 2013 to 2014 to explore new themes and to verify earlier observation.

Subsequently with the help of the RBGE, the researcher was able to secure access to other cultural and scientific organisations, which are also located in the Scottish public sector. Because of the limited time and resources, these organisations could not be investigated in a way as in-depth as the main case study in the RBGE. Instead, the research chose to conduct a field survey. The researcher collected documents through their website for basic information about their organisational structure, their published annual reports and corporate plans. When they are not available on the websites, the researcher emailed requesting these documents. Because of the Freedom of Information (Scotland) Act 2002, all email enquiries were dealt with in less than two weeks' time.

After collecting and analysis these documents, the researcher emailed to invite the key personnel responsible for producing corporate plans to interview. They are normally the managers who oversee the performance management practices in their organisations. The approach adopted was similar to 'snowball sampling' when the researcher asked interviewees to suggest and introduce further candidate suitable for interviews on the research topic. In this process, the researcher found that managers in charge of the performance management practices in the field of scientific and

cultural organisations have an informal network in which they communicate and exchange developments regarding corporate planning and performance management. As a result, candidates for interviews were targeted and approached by the researcher. These lines of enquires were then followed up by further email correspondence. The fieldwork was finished at the end of 2013 and the researcher was satisfied that saturation was reached in the sense that the similar answers from interviewees from across organisations in the field could be expected and the research questions set out could be answered with satisfactory and theoretically informed answers.

4.3 Data Collection

4.3.1 Overview

Having outlined the research design, this section provides the details on how data was collected. The following table shows a summary of the organisations included in the data collection process and the methods of data collection employed in each organisation.

Table 1 Summary of data collection

Organisations	Data Collected
Royal Botanic Garden Edinburgh (RBGE)	Observation, interviews, documents
National Library of Scotland (NLS)	Interviews, documents
National Galleries of Scotland (NGS)	Interviews, documents
Scottish Environment Protective Agency (SEPA)	Interviews, documents

National Heritage Scotland (NHS)	Interviews, documents
Historic Scotland (HS)	Interviews, documents
Crofting Commission (CC)	Interviews, documents
Roundtable with representatives from Scottish Government (funding body) and the above organisations	Workshop participation

To start the investigation of the macro context of the field, the researcher first decided to collect as much publicly available information produced regarding corporate planning and performance management as possible. Data was collected from websites and published reports (such as annual reports, corporate plans and performance reports, etc.).

Because the boundaries of fields can be difficult to define, especially the scientific and cultural organisations under investigation clearly differs from other public sector organisations such as NHS or Schools. Initially, all Executive Non-departmental Public Bodies (NDPBs) were included in the first round of data collection sample. Executive NDPBs, according to the definition from Scottish Government website, are organisations which carry out administrative, commercial, executive or regulatory functions on behalf of Government. They are normally established by statute; they employ their own staff, which are not civil servants, and manage their own budgets; and are accountable to a board whose members are normally appointed by Ministers. Focusing on performance measurements, all relevant performance information was manually extracted and gathered for later analysis. When performance information was not available from publicly available sources,

email requests were sent out to these organisations. Thanks to the Freedom of Information Act (2002), all the requests were answered within two weeks.

Content analysis was carried out on all the performance information collected and what was immediately obvious was that the amounts of performance information contained and disclosed differ greatly from some organisations to some others. For example, organisations such as Care Inspectorate, Police Complaints Commissioner for Scotland, Scottish Criminal Cases Review Commission and Risk Management Authority have a much higher amount of performance information than organisations such as National Museum of Scotland, National Galleries of Scotland, and National Library of Scotland. Another difference lies in the amount of details contained in the reports. It was soon discovered that despite the fact that these organisations are categorised as NDPB with the same governance structures, they differ significantly in the performance management practice and performance information published.

One type of the organisations have clearly defined, often singular mission which can be drilled down to various levels of performance targets and measurements. In this case, performance reports often contain abundant quantitative performance information. While the other type of the organisations, on the contrary, have multiple audiences and multiple objectives and were often providing more narratives and less quantitative performance information. This led to the questioning of the appropriateness of grouping the NDPBs as one field. Although these organisations report to one framework (NPF 2007, 2011) and are required to have similar governance structure, they differ greatly in nature and the institutions the organisations are embedded in. This draws the researcher closer to the explanation offered by the concept of 'institutional field', especially with Bourdieu's study on fields of cultural production (Bourdieu 1993). This led the researcher to narrow down the sample organisations in the first sample

to only include organisations similar to the case organisation that operate in similar fields with similar institutional logics. The findings from this part are discussed further in chapter five.

As a result, further data collection was carried out using interviews with some of the scientific and cultural organisations in the same institutional field with the RBGE. Formal interviews were taped and transcribed. Informal interviews were recorded using field notes.

In summary, data was collected over a five-year period and comprises primary data and secondary data. Primary data mainly was gathered using participant observation, interviews, proprietary and public documents. Secondary data included archival documents and texts that date back to 1989 when the case organisation first conducted corporate planning activity. The data was collected in a largely inductive manner.

4.3.2 Participant Observation

The researcher was employed in a junior administrative position in the corporate services division of the case organisation on a full time basis from August 2010 to August 2012. Therefore, no research plan or research questions were proposed. However, this period of experience and observation was important in a number of ways. First, two years was spent in gaining in-depth knowledge of the organisation; subsequently, this experience helped the researcher to identify the key actors in the study and the critical points in the timeline. Second, the immersion period allowed the researcher to reflect on employees' experiences of the change contemporaneously. Although no formal interviews or observation were specially documented for the purpose of this study, important details were recorded in the monthly report that the researcher produced as part of the job requirement. Third, an important aspect of the researcher's job

description in the case organisation was to facilitate communication between divisions. Thus, the researcher has spent a significant amount of time talking, either face to face or over the phone, with various actors in all departments on a regular basis. Fourth, as a coordinator of the new system, the researcher had email correspondence with all key actors involved in its design and implementation throughout the period of employment. Working notes taken form part of the data for this case study.

4.3.3 Interviews

Key actors' discourses are important data in this study, especially those of the senior manager and directors. However, due to the junior position of the researcher, senior management meetings and conversations were not accessible. To address this issue, interviews were later conducted mainly with managers at senior level. Interviews were conducted in two stages. The first stage was in late 2012 with the main purpose of narrowing down the research scope. The second stage was from late-2013 to mid-2014 when the main objective was to collect interview data that complemented and verified the observation and textual data.

All interviews began with investigating the interviewee's background, position and tenure in the current job. The interviewees were then directed to talk about their experience and understanding of the management accounting change and the implications of the new system to the organisation and themselves. Questions were directed in an ambiguous manner, which gave the interviewee the power to lead the interview in the direction. The interviewees were encouraged to expand and clarify their statements whenever possible. To ensure the flow of the conversation, the researcher prepared a bank of questions. Ten out of the twelve formal interviews were taped and transcribed. Interviewees are sequenced using a general job title and a sequence number instead of names to guarantee

anonymity. Four informal interviews were conducted off-tape with interview notes taken. As a research institution itself, the case organisation was fully co-operative. The researcher took advantage of previous working relationships with staff and was able to gain full access. A key fob was assigned to the researcher as a long-term visitor, which allowed the researcher visit at any time and knock on anyone's door in the focal organisation. As a result, numerous informal 'chats' of various lengths were conducted at the convenience of the interviewees without audio recording. Notes were selectively taken after these conversations. It was clear during the data collection that the most informal and casual conversations yielded the most theoretically interesting data.

With the insights from the RBGE interviews and informed by institutional theory (institutional work) and the specialist work group literature rooted in psychoanalysis, further data collection was conducted in several scientific and cultural organisations: National Library of Scotland, National Galleries of Scotland, National Museum of Scotland, Scottish Environmental Protection Agency, Historical Scotland, Scottish National Heritage as well as a comparison organization- Crofting Commission. One interview was conducted with the person in charge of dealing with performance management and reporting in these organisations. Each interview lasts from one hour to 75 minutes. Follow-up questions were communicated through email correspondence. Combining the two years of participatory observation in RBGE, data is transcribed and analysed in an inductive way to general key themes and relationships between these themes.

4.3.4 Proprietary Documents

To trace the historical development of the management accounting change, archival documents dating back to 1988 were collected. Special attention was given to the period between 2007 and 2013 when the new management

accounting system reached maturity. Despite being employed in a junior position, the researcher had access to minutes of directors' meetings and senior management team meetings. The technical details of the management accounting changes were carefully documented in an electronic archive since 2007. The research has full access to this archive. Various other internal documents were collected after the employment period including internal monthly performance reports, individual employee timesheet records, organisation newsletters and archives of the trial system and transition system snapshots[2].

4.3.5 Public Documents

Various types of public documents were collected, including publicly available corporate plans and annual reports. Scottish Government and some other Scottish public sector organisations have expressed their interest in the innovation. Draft reports have been circulated among these organisations. Further international (China, Singapore, Malaysia, the US) attention was gained as a result of the four practitioner-oriented journal articles published in professional magazines(Macnab & Mitchell 2016; Macnab et al. 2010; Macnab & Mitchell 2010; Macnab & Mitchell 2014), which focus on the technical aspect of this management accounting innovation and advocate for the benefit of adopting such a system in other contexts.

One PhD thesis titled *'Can the Balanced Scorecard supported by Strategic Objective Costing improve the Governance of Public Sector bodies such as Botanic Gardens?'* was successfully submitted by the Director of Corporate Services to the University of Edinburgh in 2011. Using an action research method, this thesis documents the detailed historical development of the performance management system and argued for the usefulness of the balanced scorecard. It focuses on the technicality of the system rather than the behavioural

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[2] The RBGE granted access to these documents after the employment period had ended.

aspects of the key actors. Nevertheless, the director of corporate services conducted some interviews regarding critical decisions during the development process. These interviews mostly took place before the researcher's employment and provided valuable secondary interview data.

4.4 Data Analysis

All interviews, field notes and extractions of documents were typed up for further coding. The basic principle of thematic coding is to identify incidents, events, pieces of information and group them to specific themes (Bryman 2012). Initial themes were subsequently supplemented and sometimes replaced by emerging themes and subthemes following an iterative process. Data was coded in three levels of themes: first-order, second-order and third-order. This approach reflects the increasing level of abstraction and theorisation (Gioia et al. 2012).

The prolonged engagement with the case organisation was particularly helpful in addressing 'why' and 'how' questions and in deriving theory from empirics through iteration processes. Themes come from both potential theoretical framework and data (Ryan & Bernard 2003).

Data coding started with transcribing. First round of coding was conducted in a bottom-up approach. The researcher attempted to use Vivo for data analysis; however, during the first round of analysis, the software did not improve the efficiency or the effectiveness of the coding process. As a result, the researcher decided to do the coding manually.

Data transcription and field notes were read repeatedly so that by the end of the first round of coding, the research was very familiar with the data. Together with the intimate knowledge of the case organisation acquired through prolonged participative observation, the researcher was comfortable

with the themes and key concepts emerged from the coding process. At the end of the first round of coding, data was grouped into categories of concepts and then higher order themes were developed with increasing abstraction.

Second round of coding employed a top-down approach. Starting from the theoretical concepts and data was categorised into themes and categories according to the pre-set concepts. Both rounds presented very similar findings. Then, data was dissected and analysed according to the position of the interviewees. It was found that although senior management tend to be more political in their statement, a stronger pattern of their discourse was found to be determined by their professions.

'Concepts are precursors to constructs in making sense of organizational worlds – whether as practitioners living in those worlds, researchers trying to investigate them, or theorists working to model them (Gioia et al. 2012, p16).' Concepts came from coding and theorising, which built constructs to making sense of the research findings.

It was found that, different perceptions and interpretations towards management accounting changes are closed linked to the professional groups that they belong, i.e. profession/occupation. This has confirmed that the choice of the institutional logics perspective was a good fit.

For example, science logic dominates Science Division in RBGE and this has led to a shared understanding of management accounting change as primarily a legitimacy seeking practice. However, their scientific approach also led the scientists to question the logics of accounting rather than just leaving it to the accountants. This is different from the horticulture logic. Horticulturists prefer to avoid the discussion into the technical details of accounting. They express a deep discomfort regarding the ideology such calculative managerial practices represented. On the contrary, employees

from Corporate Services and Enterprise Divisions express very little conflict between the rationality presented by management accounting and their professional values. They see managerial techniques as necessary both in internal management and external stakeholder relationship management.

CHAPTER 5. PERFORMANCE MEASUREMENT IN THE FIELD OF SCIENTIFIC AND CULTURAL ORGANISATIONS

The objective of this chapter is two-fold. The first objective is to examine the institutional complexity (Greenwood et al. 2011) in the field of scientific and cultural organisations. This lays the foundation for empirical findings in the following chapters on organisational and intra-organisational investigation. The second objective is to explore whether the use of performance measurement in this field reflects the complexity of the macro institutional context.

5.1 Introduction

According to the institutional logics perspective, the norms and values take centre stage and shape agents actions (Thornton et al. 2012). Research in institutional logics perspective have shown how organisations are often embedded in multiple institutional fields and have multiple institutional logics prescribing sometimes incompatible practices and actions (e.g. Battilana and Dorado, 2010; Pache and Santos, 2010; Zilber, 2002). However, the use of the concept of 'field' has rarely been articulated in detail. Here, I adopt the Bourdieu Sian concept of 'field', which has significantly influenced the concept of 'field' in institutional theory (DiMaggio 1979) even though it is rarely explicitly recognised (except Oakes et al. 1998 and Hardy and Maguire 2010).

Organisations such as the scientific and cultural organisations investigated here are producing what Bourdieu (1984) calls 'symbolic goods'. These organisations' most important output is cultural production rather than economic production because they are, first and foremost, public sector not-for-profit organisations providing public services.

Bourdieu, in his study of the field of cultural production, distinguished between restricted cultural production and large-scale production. These two oppositions form a spectrum, which, on one end has total autonomy and the other end, very little autonomy. Autonomy here is defined as the ability to reject external determinants and obey only the logic of the field (Bourdieu 1993). In the most perfectly autonomous field, the only audience of production is other producers (e.g. symbolist poetry). The field of restricted production has the inversed principles of that of business in which profit is not pursued and there is no guarantee of getting monetary gains from investments. Bourdieu labelled this issue 'economic world reversed' (Bourdieu 1993).

The field of restricted production is characterised by its ability of developing its own criteria for evaluation (Bourdieu 1993). This power of defining its own criteria for production is an important aspect that has been neglected in many performance measurement studies in the public sector. These studies often grouped organisations in the field of restricted production and organisations in the field of large-scale production together with the assumption that these organisations can be measured with a set of externally determined standards to the same extent. However, this is not true, especially for the organisations under investigation in this thesis, which are and always have been given the autonomy to define criteria for their own performances. For example, a public art gallery cannot be measured using the same criteria with those of a park. The most important measurement of the performance of a public park might be its visitor numbers; however the

performance of a public art gallery can be education, cultural inspiration as well as visitor attraction. The ultimate performance of a public art gallery can only be judged by its peer, in another term, other actors within the same institutional field.

According to the concept of field in neo institutional analysis, organisations, which have similar resource providers, regulatory agencies and consumers, could be regarded as a field. Therefore, NHS has been regarded as one field, school system in one country as one field, charities as one field. This is largely unproblematic as one profession dominates and one mutual highest objective of the organisations (such as curing the sick, educating the young) can be identified. However, organisations such as museums, libraries, galleries, botanic gardens, environmental agencies, are grouped together under one performance framework, as they are mostly 'one of a kind' in their own right.

Combining insights from Bourdieu's concept of field and institutional theoretical approach, this chapter explores the relationship between the fields and the use of performance measurements in cultural and scientific organisations such as botanic gardens, galleries and museums which are within the public sector setting with strong professional orientation and historically have enjoyed high autonomy.

To analyse the performance measurement practice in the scientific and cultural organisations, it is important to recognise that organisations of this kind have different levels of autonomy in deciding the performance criteria. And different divisions in these organisations have different levels of autonomy in deciding their performance criteria as well. The more autonomy organisations enjoy, the less they are open to external evaluation (Bourdieu 1993). This creates complexity and difficulty in applying performance

measurement and other managerial techniques which serve the stakeholders outside the institutional field rather than the actors embedded in the field.

5.2 Performance Measurement in the Field of Restricted Cultural Production

One prominent feature of New Public Management (NPM) is the increasing importance of performance measurement (Hood 1995; Hood 1991; Lapsley 2008). Various government initiatives have advocated or coerced the use of some elements of performance management, especially performance measurement. At the international level, new public management has been underway in OECD countries for decades. It is suggested that during the past 30 years, NPM has, despite criticism, integrated into the thinking about the public sector (Bogt & Budding 2010). NPM thinking is regarded as 'better practice' and therefore, normative pressure is present for the public sector organisations to 'brush-up' its management techniques. It is now common practice for public sector organisations to have some performance measurement practice in place. However, the drawbacks of PM make public sector organisations clumsy in its use (Arnaboldi et al. 2015). However, different types of organisations might have different difficulties in using the new performance management techniques. One of the reasons is how to manage organisations, which are producing intangible and mostly immeasurable outputs.

'Objects for management control are decreasingly labour power and behaviour and increasingly the mind-power and subjectivities of employees' (Alvesson & Deetz, 2006, p.256). This is especially relevant to the management of the cultural and scientific sector of the public sector. In the climate of NPM, the management of people through the use of performance management techniques can be problematic and challenging for

organisations, which are reliant on the professionals to work independently and mostly autonomously (Oakes et al. 1998).

Inspired by Bourdieu's work 'The Market of Symbolic Goods (Bourdieu 1993)' and his concepts of 'field of restricted cultural production and' and 'large-scale cultural production'. The scientific and cultural organisations under investigation in this study are located primarily in field of restricted cultural production while becoming more subject to the criteria of a large-scale cultural production. One important feature of the field of restricted production is that this field tend to develop its own criteria for evaluation and the level of autonomy of this field is determined by its power to define its own criteria for cultural production and evaluation (Bourdieu 1993). Hence, the more power a field has the more inward oriented the performance measurements will be.

However, an interesting dilemma emerges. The organisations under investigation are first and foremost, public sector organisations with an identity given as public servants. The intended audience is the public, which is one major source of legitimacy. However, these organisations have at least another important main audience they need to attend to which also is a major source of legitimacy: their peers. This dilemma creates complexity for choosing performance measurement if they were to adopt new performance management techniques. These organisations could also be characterised as being embedded in different institutional fields and have multiple institutional logics at play. How these organisations deal with this dilemma is reflected in how they conduct such performance management practices.

For example, Pettersen (2001) examines the budgeting change in the Norwegian hospital sector and concludes that more ambiguity will occur under the new funding system because leaders as clinical level had different interpretation of the model than the government intended. Also looking at

Norwegian hospital, Modell (2001) found both legitimacy-seeking and efficiency enhancing rationales in senior managers' rhetoric, hence suggesting the relevance of an institutional perspective. Another example is the increasing customer orientation in the public sector. Combining critical and institutional theories, it is found that customer oriented control mechanisms can narrow control down to measurable aspects in Swedish central government agencies which can lead to unintended consequences (Wiesel et al. 2011). Also on customer orientation, Modell (2005) provides an explanation to why it is difficult for Swedish higher education to translate the public sector consumerism into performance measurement practices. It is because, on the field level, incompatible institutional pressures cannot be accommodated. This strand of literature is ample and growing.

This chapter contributes to the literature by offering insight into a field that is characterised by institutional complexity and into how performance measurement is designed and used by organisations in this field. Drawing on institutional logics as theoretical framework, with input from Bourdieu's work on field and on cultural production, this chapter provides some explanation to the difficulties of PM use in this complex institutional environment and discusses the consequences of the continuing use of performance measurement this way, especially the effect performance measurement has on professionals and their work.

Three organisations and their published performance information are chosen to illustrate the design of PM.

First, I discuss the political and regulatory environment of the scientific and cultural organisations, as this is the first major source of legitimacy and funding. Then, I borrow Bourdieu's concept of 'restricted field of cultural production' to discuss and explain the cause of practical difficulty of performance measurements in scientific and cultural organisations. Three

examples were proposed to illustrate: Royal Botanic Garden Edinburgh, National Library of Scotland and National Galleries of Scotland.

5.3 Political Environment

Institutional theory, especially the neo-institutional theory, offers a structure for analysing organisational context (Dillard et al. 2004). Rather than claiming organisations are the consequences of their environment, organisations are shaped and influenced by institutional forces. Hopper and Major (2007) adapted the institutional neo-institutional theory as a framework to analyse the institutional environment that the company is situated. They distinguished several levels of analysis, the economic and political level, the organisational field level and the organisational level. This hierarchical structure is particularly useful as a starting point to tease out the complex institutional arrangements and structures of the Scottish public sector where the scientific and cultural organisations are located. Thus, this helps situate the performance measurement and management practices, which are the empirical focus for this thesis.

UK-wide public sector reform goes back to the 'Financial Management Initiative (FMI)' in the 1980s. FMI required all departments to define objectives and set output measures. It was then taken forward in the 'Next Steps' Initiatives in the 1990s. Hood (1991, 1995), drawing from both international and UK experience, characterise the changes as the imposition of a new logic of seeing the resource providers as 'purchasers' and the service units as 'provider' whose actions are confined by contracts. This could also be understood broadly as a movement from an 'equality-oriented' basis towards a more 'business like' approach (Broadbent et al. 2002). This is a source of coercive pressure, which led to the implementation of accrual accounting in the early 2000s as well as the increasing amount of reporting

that the case organisation has to prepare quarterly and annually. In the analysis of a Portuguese telecommunication company and their adoption of activity-based costing,

Since 1982, more than two dozens of initiatives were introduced in different parts of UK public sector. For example, Citizen's Charter programme, which was introduced in 1991, asked public units to develop performance indicators and report on performance of service delivery. A series of White Papers (1995, 1999) and Spending Reviews (1998, 2000, 2002, 2004, and 2007) were published during the last two decades reinforcing the theme of improving public sector performance by focusing on improving budgeting and performance measurement system. The public sector benchmarking initiative (1996, 2000) aim to identify areas for improvement and share best practices within the public sector. 'Choosing the Right FABRIC' Initiative (2001) aims to provide a guide with a clear set of criteria for departments to develop better performance measurement systems.

It is in this political climate that Scotland participated in this wave of reforms. To increase transparency and accountability, the Freedom of Information Act was passed in 2002 in Scotland (it was passed in 2000 in England), which signified that all public sector organisations should be ultimately open to enquiries of the public. Not necessarily in sync with the rest of the UK, various other initiatives to improve service quality have been carried out in the last decade. Over time, every part of the public sector has subjected to the subtle change of (the importance of) audiences. The National Performance Framework (NPF) was first published in 2007 and clearly established the importance of performance measurement in the operation of public sector organisations as well as the accessibility of this information to the public. Alignment with it through strategic planning and performance management is required by all public sector organisations. 15 National Outcomes and 45 National Indicators were identified in this framework. The NPF was updated

in 2011, adding one new National Outcome and changed the National Indicator was updated.

NATIONAL PERFORMANCE FRAMEWORK

THE GOVERNMENT'S PURPOSE
To focus government and public services on creating a more successful country, with opportunities for all of Scotland to flourish, through increasing sustainable economic growth

HIGH LEVEL TARGETS RELATING TO THE PURPOSE
Growth   Productivity   Participation   Population   Solidarity   Cohesion   Sustainability

STRATEGIC OBJECTIVES

WEALTHIER & FAIRER	SMARTER	HEALTHIER	SAFER & STRONGER	GREENER

NATIONAL OUTCOMES

We live in a Scotland that is the most attractive place for doing business in Europe

We realise our full economic potential with more and better employment opportunities for our people

We are better educated, more skilled and more successful, renowned for our research and innovation

Our young people are successful learners, confident individuals, effective contributors and responsible citizens

Our children have the best start in life and are ready to succeed

We live longer, healthier lives

We have tackled the significant inequalities in Scottish society

We have improved the life chances for children, young people and families at risk

We live our lives safe from crime, disorder and danger

We live in well-designed, sustainable places where we are able to access the amenities and services we need

We have strong, resilient and supportive communities where people take responsibility for their own actions and how they affect others

We value and enjoy our built and natural environment and protect it and enhance it for future generations

We take pride in a strong, fair and inclusive national identity

We reduce the local and global environmental impact of our consumption and production

Our people are able to maintain their independence as they get older and are able to access appropriate support when they need it

Our public services are high quality, continually improving, efficient and responsive to local people's needs

National Performance Framework – Measurement Set

Increase Scotland's Economic **Growth**	Improve **Productivity**	Improve Economic **Participation**	Increase **Population** Growth
PURPOSE TARGETS			
Population – Increase Healthy Life Expectancy	**Solidarity** – Reduce Income Inequality	**Cohesion** – Reduce Inequalities in Economic Participation Across Scotland	**Sustainability** – Reduce Greenhouse Gas Emissions

NATIONAL INDICATORS

Increase the **number of businesses**	Reduce the percentage of **adults who smoke**
Increase **exports**	Reduce **alcohol related hospital admissions**
Improve **digital infrastructure**	Reduce the number of individuals with **problem drug use**
Reduce **traffic congestion**	Improve people's perceptions about the **crime rate** in their area
Improve **Scotland's reputation**	Reduce **reconviction rates**
Increase **research and development** spending	Reduce **crime victimisation** rates
Improve **knowledge exchange** from university research	Reduce **deaths on Scotland's roads**
Improve the **skill profile** of the population	Improve people's perceptions of the **quality of public services**
Increase the proportion of **pre-school centres** receiving positive inspection reports	Improve the **responsiveness of public services**
Increase the proportion of **schools receiving positive inspection reports**	Reduce the proportion of individuals living in **poverty**
Improve levels of **educational attainment**	Reduce **children's deprivation**
Increase the proportion of **young people in learning, training or work**	Improve access to suitable **housing options** for those in **housing need**
Increase the proportion of **graduates** in positive destinations	Increase the number of **new homes**
Improve **children's services**	Widen **use of the internet**
Improve **children's dental health**	Improve people's perceptions of their **neighbourhood**
Increase the proportion of babies with a **healthy birth weight**	Increase **cultural engagement**
Increase the proportion of **healthy weight children**	Improve the state of Scotland's **historic sites**
Increase **physical activity**	Increase people's use of Scotland's **outdoors**
Improve self-assessed **general health**	Improve the condition of **protected nature sites**
Improve **mental wellbeing**	Increase the abundance of terrestrial breeding birds: **biodiversity**
Reduce **premature mortality**	Improve the state of Scotland's **marine environment**
Improve **end of life care**	Reduce Scotland's **carbon footprint**
Improve support for people with **care needs**	Increase the proportion of journeys to work made by **public or active transport**
Reduce **emergency admissions** to hospital	Reduce **waste** generated
Improve the quality of **healthcare experience**	Increase **renewable electricity** production

Figure 6 National Performance Framework (2011) [3]

The government wish to devolve the responsibility for the service by making
public sector organisations more accountability while retaining control over

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[3] From http://www.scotland.gov.uk/

key decisions (Llewellyn & Tappin 2003). In this situation, strategic management and performance management are argued to be more suitable vehicles than policies (Pollitt & Bouckaert 2011; Pollitt 2006a; Pollitt 2006b). The advocacy of strategic management takes the power away from the professionals who have been the front line of public services. Hence, the internal allocation of resources which used to be determined by professionals now tends to be dependent on managerial values (Ezzamel et al. 2012).

As part of the Spending Review (Scottish Government 2007) at the start of the third Session of Scottish Parliament, the National Performance Framework (NPF) (2007) was introduced. It consisted of one purpose, five strategic objectives, 15 national outcomes and 45 national indicators. All public sector bodies have to conform to the NPF and report in respect of the national strategy and performance measurements. In December 2011, the Scottish Government 'refreshed' the NPF by adding one new national outcome and adjusting the national indicators to a total number of 50. This multi-level framework underpins the delivery of the government's agenda regarding public services.

However, the implementation of this framework has not been easy. Llewellyn and Tappin (2003) argue that the reason for this is that "strategic management is not rooted in the public sector but 'planted' in the public services as public sector cultures are uncultivated ground for strategic thinking" (Llewellyn and Tappin, 2003). They give three reasons as to why public services organisations lack strategic thinking. First, these organisations face little competition and survival is a given. Second, these organisations tend to be inward looking bureaucracies and they tend to minimise the strategic interventions to remain stable over time. Third, these organisations often face inconsistent demands and insoluble problems from various stakeholders that make the articulation of strategy very difficult (Llewellyn and Tappin, 2003).

It is within this broader political context that the Scottish public sector bodies started to engage in business planning and performance management activities. The focus of this thesis is the scientific and cultural public sector organisations, which are labelled under Executive Non-departmental Public Bodies (NDPBs) in the Scottish public sector arena (see figure 5 below for official definition of the classification).

| Executive NDPBs | • Operate within a Strategic Framework set by Ministers;
• Have their own legal identity i.e. are established by statute or set up as companies ltd by guarantee;
• Carry out administrative, commercial, executive or regulatory functions on behalf of the Scottish Government;
• Provide specialist advice to Ministers and others;
• Headed by a Board which is appointed by Ministers;
• A body corporate, staff are employed by the body and are not civil servants;
• Allocated and manage their own budgets. | • Directly accountable to Ministers, and through Ministers to Parliament;
• Chief Executive is designated as the Accountable Officer;
• Accountable Officer responsible for the use of resources but Ministers remain accountable to the Parliament for the allocation of public funds;
• Board holds the Chief Executive to account;
• Ministers ultimately accountable to Parliament for the functions and performance of the body and have the power to wind it up (subject to Parliamentary approval (as required));
• The relationship between Ministers, SG and the NDPB is set out in the relevant legislation and the Management Statement/Financial Memorandum;
• Most NDPBs funded by Grant-in-aid (some are funded through sectoral levies) and receive an annual guidance letter;
• Subject to relevant guidance issued by Ministers e.g. the Scottish Public Finance Manual;
• Ministers agree Corporate and Business plans and appoint (and can remove) Board members;
• Subject to a general or specific Ministerial power of direction (with appropriate safeguards in certain circumstances)
• Prepares its own annual reports and accounts which are presented to Ministers and laid in front of Parliament. |

Figure 7 Scottish Government Public Body Classification Guidance[4]

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[4]Snapshot from http://www.scotland.gov.uk/

The introduction of one NPF denotes that all these organisations in this group have to comply with the same framework. The organisations are required to demonstrate how they contribute to the national outcomes in their corporate documents with the support of the use of performance measurements.

Apart from the fact that these organisations are inexperienced in NPM type managerial practices, these organisations differ greatly from each other in many aspects, from their funding levels, sizes, objectives, number of staff, etc.. Subjecting these organisations to the same framework, the differences could lead to potential side effects.

I draw on the concepts of field and institutional multiplicity to unpack the complexity of this group of organisations. This chapter argues that the one largely ignored reason behind possible side effects is that these organisations are located in many different fields (with different institutional logics). These fields include what Bourdieu calls 'restricted field of cultural production' and 'large-scale fi

Furthermore, the organisations under investigation are found to be located in multiple fields at the same time, hence they should be analysed as hybrid entities with multiple professional groups rather than one tightly coupled organisation working in one direction. These organisations are unfamiliar with business-like behaviour which is taken for granted in the private sector. And they are used to the self-paced, incremental changes historically, and therefore naturally, they are reluctant to the idea of rapid changes favouring private sector market ideology. These organisations face the challenges of forming a strategy, thinking and acting strategically. Also because of the major differences, these organisations are likely to embark on organisational changes following different trajectories, resulting in more diversification in

institutional change processes rather than homogeneous change process suggested by neo institutional theory.

Performance management practices are tools to help the change process. However, not all of the public sector organisations are able to make these transitions, as the rest of the chapter will illustrate, that some organisations cannot easily be 'made to measure'.

5.4 Examples of Scientific and Cultural Organisations

Reviewing the performance measurement of scientific and cultural organisations, some patterns emerged. Scientific and cultural organisations with multiple objectives tend to provide very little quantitative performance information and instead, they provide narratives of professional activities without establishing explicitly how the activities contribute to intangible outcomes.

According to Bourdieu (1993), when operating in a field of restricted cultural production, the organisations are more able to define their own performance criteria rather than being evaluated by externally imposed measures. This is because organisations in a more restricted field have more autonomy in setting evaluation standards (Bourdieu 1993). However, the scientific and cultural organisations investigated in this thesis do not only operate in the restricted field of cultural production, they also engage in what Bourdieu calls, the large-scale production. Because these organisations are home to various professions and multiple institutional logics, the use of performance measurement can be both controversial and consequential.

The following section looks at three cases of such organisations as examples namely, the Royal Botanic Garden Edinburgh (RBGE), National Library of Scotland (NLS), National Galleries of Scotland (NGS) and their use of

performance measurement to elaborate on the relationship between the field and the performance measurement problems they might face.

5.4.1 Royal Botanic Garden Edinburgh

The Royal Botanic Garden Edinburgh (RBGE) was founded in the 17th century as a physic garden. Over 330 years it has evolved into a garden which 'means many things to different people' (Reguis Keeper's message from website, Jan 2015). RBGE is made up of parallel divisions of different professional groups. Each group and division has different objectives. Scientists and horticulturists have different goals and practices. They are embedded in different professional fields and they have different audiences and peer groups. They interpret performance measurement practices through different institutional orders. For example, the scientists focus on research and preserving biodiversity of the world of plants. Their primary audience is their peers, other scientists. Horticulturists, on the other hand, are focusing on landscaping and keeping a living collection in the gardens for the purposes of research. This makes these professionals reside simultaneously in their professional fields as well as the field of other public sector organisations such as museums and galleries. With the autonomy to define their own performance criteria, their tendency is to have internally oriented measurements.

Interestingly, during the interview, scientists and horticulturists stated that there are 'better measurements for sure', however, as long as 'the Scottish Government is happy, I'm happy'. They tend to provide performance information as a way of fulfilling their administrative duties rather than trying to find the best possible measures that could potentially better inform the information users. This could be explained by their reluctance to mix different criteria used in different fields. Like one scientist remarks that 'we are using the number to feed out to people that we think people would be

interested externally but there are not necessarily the numbers that we internally use to plan.'

While scientists and horticulturists work in a field of restricted cultural production where their peers are the audience of their work, the visitor welcome team in a botanical garden work in a different field more similar to large-scale cultural production. They welcome certain numbers of visitors and the performance measurement of their work activities is relatively externally oriented. For divisions in the field of large-scale production, the managers believe that they are using proper performance measurements and they do not experience the type of 'mismatch' that the professionals in a restricted production field experience.

Thus, scientists and horticulturists feel their work achievements are not well reflected in the performance measurement system. They express the fear that if future funding is somehow linked to performance measurement, then they will be disadvantaged.

5.4.2 National Library of Scotland

National Library of Scotland (NLS) is one of Europe's leading research libraries, which collects, preserves, and manages important collections from worldwide sources. NLS was founded in 1680 as the foundation of the Faculty of Advocates' law library, which then in 1925 became the National Library of Scotland, which since grown to house fifteen million printed, copies today. Being a Legal Deposit library, NLS has enjoyed this privilege for over 300 years, which benefited its collections.

In recent years, the library has faced the challenge of digitalization and the transformation from a research library to a more accessible and outward-focused library to the public.

The governance structure of the library is similar to that of the RBGE. A board of trustees is pointed by the minister to form a new governance arrangement replaying the governance structure of the 1925 National Library of Scotland Act. The new strategic priority is to improve accessibility and connectivity. While facing continuous funding cut, apart from reducing the number of staff, the nature and pattern of service delivery may, in the process, be redefined.

In the recent corporate plan (2012 – 2015), strategic outcomes and objectives are set out which are then translated into action plans. However, the use of performance measurements (they call KPIs) is mostly for broad quantitative information. The 12 KPIs used in the corporate plan are: additions to collections; additions to Scottish collections; condition of collections; digital objects created; staff absence; funds raised; media profile; visitors to events; use of website; reading room visits; catalogues and enquiries. These KPIs are monitored on a quarterly basis when then compared to target.

The KPIs listed above are very high-level broad numbers easily collected. However, when I was asking about how these information was collected and used. One of the staff members expressed their (lack of) concern for the KPIs. Similar to the scientists in the botanical garden, the professionals are reluctant to engage in finding better measurement for their professional work. Instead, they report under the current set of targets while dismissing their significance in their work. An example was given on the KPI of 'number of enquiries':

> *'A good example is the number of enquiries. So we count all enquiries. If you email us asking our address, it is one email and one enquiry. And across the library, lots of different units get enquires. We will produce a total every year. Some enquiries are like my telephone number is changed here is my new number. Another one might be, I'm researching the manuscripts of the following 17th century botanist and can you have a look and let me what you have got? And it might*

*take a very experienced curator hours to go through the
collection. If they see fit, they would get quite involved.'*

*'These KPIs are all very well, but they don't really address
the central strategic questions of should we continue to spend
as much money on books or should we spend more on
electronic; or should we make the opening hours longer or
are they long enough or should we make them shorter; or
should we divert some our resources to providing remote
services or should we continue to staff the reading rooms.'*

When asked about the quality and role of the performance information in the reports produced, the analogy of 'desperate patch work' was used by one of the interviewees. However, some managers with a more managerialistic background are very wedded to the idea of performance measurement. One manager in NLS says that 'we must make managers take their key performance information medicine no matter how little they like it'.

5.4.3 National Galleries of Scotland

Similar use of performance measurement is also found in the National Galleries of Scotland (NGS), also an organisation with multiple objectives. Funded by the Scottish Government, NGS holds one of the best fine art collections in the world. On top of preserving and displaying fine art, education and tourism are both important objectives that are also required by Scottish Government and the public. The same tension exists between professional logic from the field of restricted cultural production and logic of the external-oriented activities from the field of large-scale production.

When interviewed for the role and importance of performance measures. The answer was as follows:

*'Yes, absolutely, because when we propose an exhibition, and
we say we are going to get this sculpture from the museum of
X and we are going to exhibit them for six week in April and
May and it is going to cost this much, then our management
will ask how many visitors in those months, say 10000*

whatever, it is very important because they will say we can't
justify this spending for this many visitors, and if you have
20000, say, then you are good to go.'

The interviewee subsequently stated that the use of performance measurement (KPIs) is almost a means for justification rather than a mechanism for decision-making. Also, they tend to 'grab the easy one' when one is needed for certain situation, such as that justifying an exhibition. Because some of the activities (mainly those conducted by artists and historians) cannot be easily (or fairly) measured, they restrain from conducting a thorough performance measurement practice.

There is also a disconnection between people who collect information and who use and interpret it. One interviewee mentioned that 'it is like reading tea leaves' when they need to make a story out of the information someone else compiled. When asked why they did not collect information themselves. When interviewed about the cause of poor performance information, it is found that the reluctance to improve the quality of performance information goes beyond simple lack of effort. The real reason is the resistance to what such managerial techniques represent – an invasion of important professional space and an intention to override professional values and routines by managerialism.

5.5 Discussion

This chapter is informed by institutional theory, particularly the concept of restricted field of cultural production (Bourdieu 1993). By dividing scientific and cultural organisations into different components which are embedded in different institutional fields (restricted field of cultural production with more autonomy and large-scale production with little autonomy), the sources of institutional multiplicity can be conceptualised to explain the difficulty in

applying managerial techniques such as performance measurement in complicated institutional context.

This chapter proposes re-examining the issue of performance measurement at the field level. Using several scientific and cultural organisations as examples, it is argued that these organisations are complicated because they are embedded in different fields with different levels of 'openness'(Oakes et al. 1998).

Rather than looking at such organisations as homogeneous entities embedded in its regulatory environment, each working group/division dominated by different professions (such as scientists or artists) can be seen as embedded in the regulatory field, while at the same time embedded in their relative professional fields. For example, the science division in the Royal Botanic Garden Edinburgh (RBGE) can be seen as a work group embedded in the regulatory environment of the field of Scottish public sector, specifically the field of non-departmental public bodies, but more importantly, this work group is embedded in a field of scientific botanic research, in the same institutional field with other organisations/divisions/departments conducting similar research, such as a university botany department, regarding their research activities. This conceptualisation sheds light on the complexity of such institutional context.

In context like this, the more autonomous institutional field have more power in deciding their own performance criteria. Such as the work of the scientists, it is mostly peer reviewed within the science field. This contrasts the criteria of institutional fields of large scale production. For example, the visitor welcome teams of the scientific and cultural organisations provide service to the public. They have to work toward the standards set by their regulatory bodies regarding visitor numbers, visitor satisfaction rating and visitor return rate, etc... These work groups have little autonomy over the

performance criteria of their work. When an organisation harbours both types of work groups, performance measurements are more easily applied in the latter type of work groups.

Public sector setting is generally considered inherently complex (Lapsley & Skærbæk 2012; Lapsley 2000). This chapter offers another way of looking at the origin of some of the complexity in the adoption and implementation of management accounting techniques, such as performance measurements, in the context scientific and cultural organisations.

Professionals in this context can deem managing with performance measurement and input-output framework as inappropriate and sometimes demeaning. As a result, the professionals have the autonomy to refuse performance measurement as criteria for their work.

This creates a dilemma for the organisations involved in both kinds of cultural production and no consensus on hierarchy of objectives can be reached.

While organisations conduct work in both the field of restricted production and the field of large-scale production, it is easier to measure and evaluate the work output and outcome of the field of large-scale production. Over time, the performance measurements chosen reflect more of the latter than the earlier.

Unintended consequences can result from subjecting such scientific and cultural organisations to the same performance measurement requirements such as that of the National Performance Framework of Scotland. Organisations like the RBGE, NLS and NGS are dominated by more than one profession working towards multiple objectives and conducting multiple activities that cannot be simply evaluated.

Putting the scientific and cultural organisations with other types of public sector organisations together in one performance measurement framework creates further dysfunctional effect on the field level. When these organisations are evaluated together with organisations without such institutional complexity, the use of management techniques (such as performance measurement) will discourage the more complex organisation embedded in multiple fields, hence, destroying professionals' morale.

In the fields of cultural production, there can be significant unbalance in the performance measurements regarding the field of restricted production and the field of large-scale production. If the NPF and the use of performance measurement are the required way of demonstrating achievements, over time, the achievements in the field of restricted production will likely be under-represented. Therefore, the value of organisations such as the RBGE, NLS and NGS can never really be reflected using simple techniques like performance measurement. In fact, the potential for performance measurement and similar techniques is limited due to the nature of the restricted cultural production. The introduction of such techniques is not a mere additional layer of the management repertoire. They poke at the much cherished centre of professional autonomy and may lead to significant institutional changes when professionals' power is diminished.

In the next two chapters, I take a closer look at one such organisation, the Royal Botanic Garden Edinburgh (RBGE), which is embedded in multiple fields with multiple institutional logics. The longitudinal development process of a new management accounting system is examined through institutional theory lens. Focusing on the dynamics between different professional groups, which are characterised by different institutional logics, the next chapter aims at describing the technical side of the new management accounting system and its introduction and implementation process. This is followed by a chapter examining the management

accounting change through the lens of institutional logics perspective, revealing the nuanced and subtle micro-processes of the management accounting changes and the micro institutional change processes.

CHAPTER 6. THE CASE OF THE RBGE – PART I

MANAGEMENT ACCOUNTING CHANGE

This chapter provides details on the management accounting change in the case organisation – the Royal Botanic Garden Edinburgh- that includes a Balance Scorecard, a strategy map, a costing and budgeting system and an online-based strategic management software system.

6.1 The Royal Botanic Garden Edinburgh Case

> *More grows in the garden, and then the gardener knows he was planted.*
>
> *- Spanish proverb*

The Royal Botanic Garden Edinburgh (RBGE), an 80% government funded body (the rest comes from research grants, capital grants and self-generated income), is a public sector organisation with a highly qualified staff in four divisions (Science, Horticulture, Corporate Services and Enterprise) contributing to multiple strategic objectives (research, education, conservation, visitor attraction, income generation etc.). It was first founded in 17th century as a physic garden and was recognised by The National Heritage (Scotland) Act 1985 as a Non-Departmental Public Body (NDPB). Now it has four regional gardens across Scotland with over 800,000 visitors per year. The RBGE holds one of the richest living collections of plant species in the world. It is a world-renowned centre for botanic science with the world's largest research groups of plant taxonomists and the widest

education programmes. As protecting biodiversity and combating climate change are high on the government agenda, RBGE has secured level funding even during the heavy government budget cut period. The organisation employs around 200 staff from a variety of disciplines, contributing to its strategic objectives and functions. RBGE is a multi-purpose organisation which aims to serve the public by carrying out scientific research (Division A), providing world-class tourist attraction and specialist education programmes (Division B) as well as generating commercial income (Division D). Division C provides corporate services to the whole organisation.

RBGE is organised in four divisions (See figure 8): Science (A), Horticulture (B), Corporate Services (C) and Enterprise (D) with a Regius Keeper (CEO). It also has two management committees made up of senior managers. Senior management team (SMT) meets once a month making key operational decisions which senior management group (SMG) meets less frequently to review periodical performance.

The Royal Botanic Garden Edinburgh is managed by a hierarchical management structure with each layer accountable to the one above for the discharge of duties. Ultimate responsibility for the effectiveness of management lies with the Board of Trustees.

Scottish Government's Environment and Forestry Directorate
ENFOR

The Royal Botanic Garden Edinburgh is a Non Departmental Public Body (NDPB) sponsored and supported through Grant in Aid by the Scottish Government's Environment and Forestry Directorate (ENFOR). Scottish Ministers appoint the Board of Trustees.

Royal Botanic Garden Edinburgh Board of Trustees

The Main Board of Trustees oversees the management of the RBGE and provides strategic guidance to the senior management. The Board, through its Chairman, is accountable to Scottish Ministers

The Audit Committee ensures financial propriety and that an adequate risk management structure is in place.

The Board of Directors for the Botanics Trading Company Limited (BTC) oversee the commercial aspect of the Garden and is accountable to the Main Board of Trustees

Regius Keeper

Is the Chief Executive of the Garden and is accountable to the Chairman of the Board of Trustees for the effective, efficient and economic management of the Garden. He is also appointed as the Accountable Officer for the Royal Botanic Garden Edinburgh and is responsible to the Scottish Parliament for these duties.

Senior Management Team (SMT)

Regius Keeper
Director of Science
Director of Horticulture
Director of Corporate Services
Director of Enterprise

Collectively make organisational management decisions on matters which affect the Garden as a whole.

Senior Management Group (SMG)

Regius Keeper
Director of Science
Director of Horticulture
Director of Corporate Services
Director of Enterprise
Head of Finance
Deputy Divisional Directors
Head of Marketing

The Group meets to review financial and other performance management issues and also recommends the Agenda for the Board of Trustees meetings.

Divisional Hierarchy

Directorate
Regius Keeper

Science
Director of Science

Research Programme
Herbarium
Library / Photo / Publications
Scientific Services

Horticulture
Director of Horticulture

Curation & Development of Gardens
Education
Environmental Management

Corporate Services
Director of Corporate Services

Corporate Management
Finance
Human Resources
Estates Management
ICT

Enterprise
Director of Enterprise

Development:
Fundraising & Membership
Commercial Management
Visitor Welcome

Updated: February 2014

Figure 8 Organisational and Management Structure of RBGE

To gain a thorough understanding of the case organisation and its historical development of the new performance management system, it is necessary to trace back to when and in what institutional context the first attempt of new management practice was made. Table 2 outlines the key events during the historical development of the new system since 1986 when the case organisation was recognised as a Non-departmental Public Body (NDPB) by the Scottish Government.

In the next section, we present the historical development of the new performance management system in a chronological order.

Table 2 Timeline of Key Historical Events in the Development of the New System

Timeline	Key Events in the historical development of the new performance management system
1986	The RBGE was first recognised as a NDPB by the National Heritage (Scotland) Act 1985
1988 - 1995	The RBGE drafted the first corporate plan which was not published until 1995 in response to government requirement and the subsequence guidance issued DAFS
2000	New Reguis Keeper and new directors appointed. Botanic 21 (strategy review which lasted 5 months), strategy document published as a result and new vision of the garden developed.
2004-2005	Balanced scorecard concept introduced, first corporate plan using balanced scorecard published.
2006	Balanced scorecard updated, the first strategy map developed based on the balanced scorecard.
2007-2009	On-line management system (ESM) introduced to the

	senior management and a trial started. Balanced scorecard and strategy map updated, both linked to the Scottish Government agenda. Time recording of staff started.
2010	Major revision and simplification of ESM and time recording system. Commitment to the system from other divisions increased.
2011	Strategic Objective Budgeting (SOB) under development. Recognition from Scottish Government.
2012	Strategic Objective Costing (SOC) developing and received attention from interested parties abroad
2013	ESM revision again, continue development of the system and the innovative management accounting methods, SOB/SOC.

6.2 Precursor to Management Accounting Change

The period between the organisation's first encounter with corporate planning activity to the appointment of the current Director of Corporate Service is labelled precursor period. During this time (1987-2001), the organisation produced corporate plans in response to the funding body's requirements as a gesture of complying with the funding body's requirement. It was not until the current Director of Corporate Services was appointment when the managerial logic found representation in the organisation.

Since recognised as an NDPB (Non-Departmental Public Body) by the Scottish Government in 1986, the RBGE was subjected to the regulation set out by the sponsoring department then - Department of Agriculture and

Fisheries for Scotland (DAFS). In 1987, all organisations under DAFS were required to develop corporate documents containing strategy discourse (DAFS 1987)[5]. DAFS suggested that a Corporate Plan should contain strategic objectives and aims and how they fitted in with national and international priorities for botanical effort; some challenging but realistic targets (Macnab 2011). The first attempt of producing a corporate document in the RBGE was in 1988. A group of middle and senior staff were gathered together to draft the first-ever corporate plan. Exiting Corporate Plans from other public sector organisations were used as inspiration, such as Royal Botanic Gardens Kew, the English Heritage. On March 4th 1988, the first draft of corporate plan was produced. The majority of the plan was to describe existing activities and provide justification for various operations, only one section contained strategic objectives where were: research, education and amenity.

The purpose of producing the document was to satisfy the regulatory requirements of the government. No internal use of this practice was intended. One member of the planning group noted that *'In my view, the corporate plan was a newly imposed requirement from DAFS but was of no benefit to the RBGE.'*(Alasdair, 2011; p.106) General attitude towards this type of corporate planning exercise was negative but tolerant. As one previous Regius Keeper (head of the garden) commented that *'I thought it reasonable for DAFS, as the funding body, to expect some documentation to explain how public funds were to be spent by the RBGE. However, I believe that the Plan, once submitted, would be filed and put to no further use by the Government.'*(Alasdair, 2011; p.106-107)

However, after several corporate planning cycles and attempts to 'get it right', some benefits were recognised by organisational actors. In the Executive Summary of the 1996 corporate plan, it was conceded that 'RBGE

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[5] DAFS letter Reference: K2202502. 117 dated 18 November 1987.

remains in the early years of this new corporate way of thinking and planning systems remain immature and inevitably flexible.'

This could be understood as an apologetic statement to the sponsor department on the quality of the document. It also suggests that by 1996, there had been a change in the attitude at RBGE towards corporate planning activities. Instead of writing the process off as a legitimacy gaining exercise, some positivity has entered the organisational discourse. For example, when asked about the earlier experience of corporate planning activities, a senior scientist stated that '*As far as I can recall, I think that the main purpose of the corporate plans, at that time, was to prioritise activities and expenditure within the RBGE. They also served as discussion/bidding documents for additional funding to support the core science effort*' (Alasdair, 2011; p. 111)The corporate plan of 1996 also exhibited more complexity and sophistication. Multiple activities and objectives were identified. (See Figure 8)
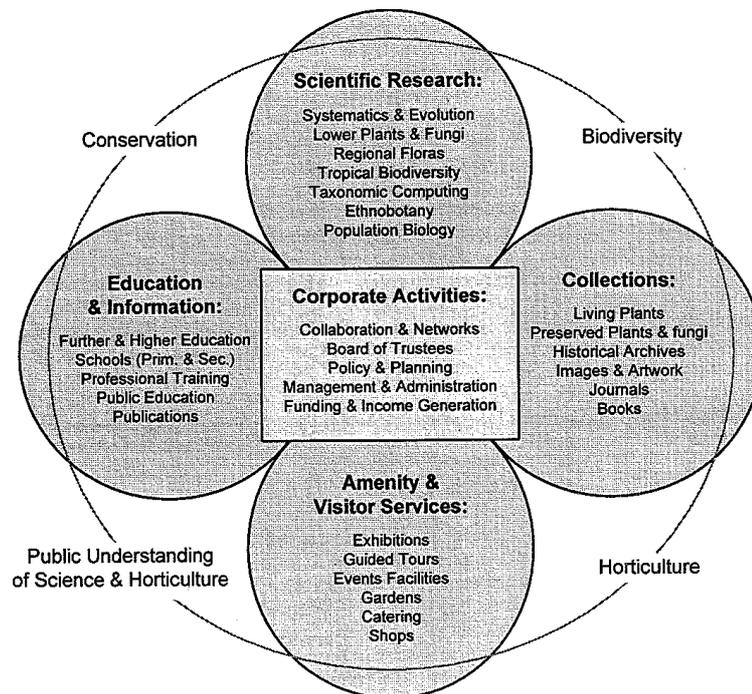
Figure 9 Corporate Activities in Corporate Plan 1996 Version

However, the corporate planning process remained marginalised within RBGE. The scientists felt that they had more important work to do and the limited time and resources in which to perform it. As a result, the task of producing the report was delegated to the Head of Library.

In early 2000, a new Reguis Keeper was appointed and his tenure lasted till late 2013. A new Director of Corporate Services was also appointed in late 2000 and it was agreed that he would assume responsibility for fulfilling the governmental requirement of corporate planning and performance management. For the first time, corporate services division was put on the same administrative level as the science division and the horticulture division. Following these changes, the institutional environment began to stabilise and this created the context for the subsequent implementation and development of a new performance management system.

Two phases of the development can be identified. Each phase is discussed in detail below.

6.3 From 2001 to 2006: Introducing Balanced Scorecard and Strategy Map

After the new senior management team took posts, the new Reguis Keeper initiated a strategic review process which lasted 5 months. As a result, a document titled "Botanics 21" set out the future direction of the RBGE. Subsequently, 8 strategic objectives were defined: Collections, Research, Plant Conservation, Education, Plant Services, Organisational Development, Income Generation and Management.

Used as a communication device, this document linked all divisions and departments together under the common vision that the RBGE is to *'flourish as a place of inspiration and creativity, offering a distinctive mix of research,*

conservation and education that explained and celebrated the rich floristic diversity of the planet'.

In 2004, the Director of Corporate Services introduced the concept of balanced scorecard to the RBGE. As a popular technique initially developed for the private sector, business research suggested it could be modified to contribute to strategy development and implementation in the public sector organisation (Kaplan & Norton 1996). The balanced scorecard idea managed to get some senior managers interested. The attraction lies in the 'linking' capacity of the device. It links the vision statement with the four perspectives: audiences, internal processes, governance and resources.

However, as a scientific organisation, there has been a strong antipathy to business terminology. This led to a redesign of the balanced scorecard in order to get it fully 'domesticated' in 2006. Inspiration was taken from Niven (2011) in adapting balanced scorecard for public and not-for-profit sectors uses. Apart from taking out all commercial terminologies, a fifth perspective was added to the balanced scorecard on top of the four existing perspectives – the Scottish Government' National Outcomes, linking the RBGE with the Scottish Government. This version is still being used today. (See Figure 10)
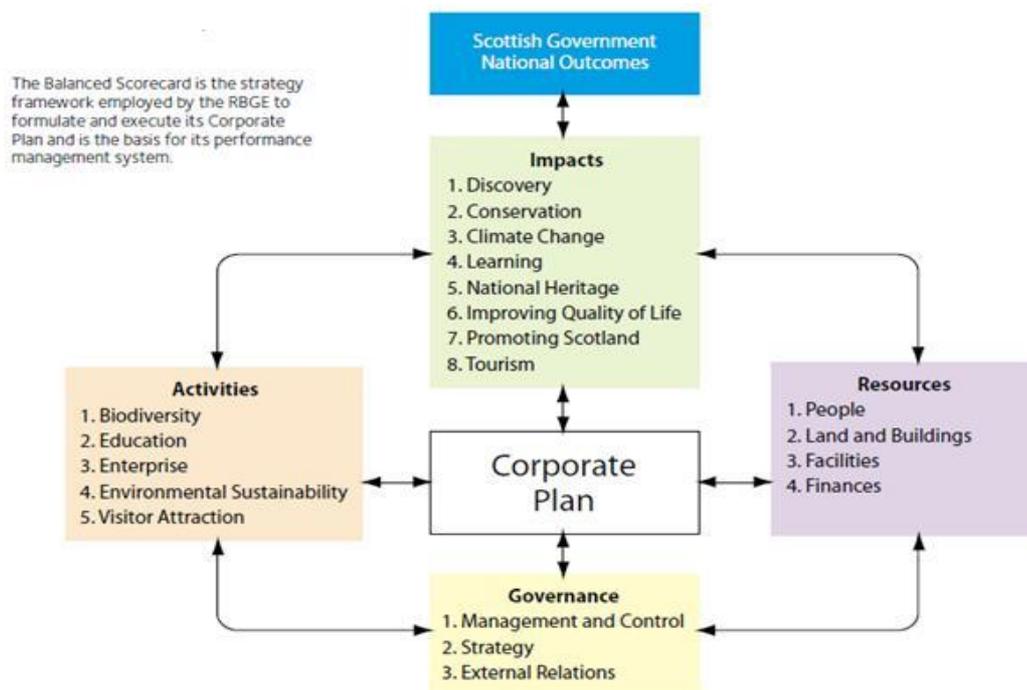
Figure 10 RBGE Balanced Scorecard from Corporate Plan 2013

In this way, the new balanced scorecard could not only communicate the strategic objectives internally but also illustrate how this organisation as a whole contributed to the government agenda. This capacity of the device made its use legitimate to stakeholders both inside and outside the organisation. The adaption and use of the popular balanced scorecard technique resulted in the further alignment of various interests of different actors from different divisions as well as the funding body in the government. The balanced scorecard contributed substantially to the communication of the formulated strategy. In addition to linking the internal with the external, this device also linked the four parallel divisions in their contributions. Acting as an over-arching planning framework, the balanced scorecard was recognised as valuable by the organisation members. Enabling visualisation of the entire organisations' activities and objectives on one page proved to be popular to all divisions.

'Having seen the corporate planning process over a period of some 30 plus years, although not always as a participant, I can clearly see the benefits of having a framework to assist with ensuring that the organisational activities are properly aligned to those of the Institute's goals. Since using the Balanced Scorecard, I have noticed that it is a much more efficient and less bureaucratic process to complete the corporate plan from the days when each of the divisions had to write long documents in support of the Corporate Plan, which eventually were simply filed and ignored for the remainder of the year.' (Director 3)

In 2006, a strategy map based on the balanced scorecard was introduced. The strategy map contains clear cause - effect relationship. The logic underlying the balanced scorecard and the inter-relationships of the perspectives in the balanced scorecard and performance measures were made apparent to the staff. It enabled the counterparties to view the work of the organisation 'all on one page'. This map shows the links from organisational input to output, to strategic objectives, impacts, up to the government objectives.

Royal Botanic Garden Edinburgh
Exploring and explaining the World of Plants for a Better Future

Scottish Government National Outcomes
- Business
- Employment Opportunities
- Research and Innovation
- Young People
- Children
- Healthier Lives
- Sustainable Places
- Environment
- National Identity
- Environmental Impact
- Public Services

Impacts
- Discovery
- Conservation
- Climate Change
- Learning
- National Heritage
- Improving Quality of Life
- Promoting Scotland
- Tourism

Activities
- Biodiversity
- Education
- Enterprise
- Environmental Sustainability
- Visitor Attraction

Resources
- People
- Land and Buildings
- Facilities
- Finances

Governance
- Management and Control
- Strategy
- External Relations

Figure 11 Strategy Map from Corporate Plan 2013

Senior managers were particularly glad about this development as it enabled them to 'view strategic performance at a glance'. They also expressed their approval of having such a framework to assist with ensuring that the organisational activities were properly aligned with the organisational objectives, and further with the government agenda.

'...in particular, the strategy map device had been very useful to articulate the Corporate Plan to various audiences both internal and external. The culture of the RBGE, developing the performance management system had been challenging to develop to a configuration that encouraged staff members to participate but I feel that the effort has paid dividends as considerable inputs were now being made from across the organisation.' (Director 1)

'When the RBGE aligned itself to Scottish Government's national Outcomes the strategy map assisted with placing the RBGE's work in context with that of Scottish Government and its Science strategies. This had proved to be beneficial when the Science Management Group were debating their future plans.' (Director 2)

The combination of the balanced scorecard and the strategy map allows the linkages not only between organisational input and output, impact and outcome; but also between four divisions; between the RBGE and the Scottish Government. They contributed to further engaging various organisational actors.

Up to 2007, the responsibility of engaging with this system rested with senior managers, in particular directors and deputy directors. With the encouragement from the sponsoring department in the government, the initiative gained momentum into the next phase when tension and unexpected consequences emerged.

From the discourses of the divisional directors, up to this point, the attitude towards this system has been somewhat unified. Organisation members generally agreed that the system was helpful in dealing with the external pressures from the sponsoring department.

However, this took a turn when more accounting devices came to join the picture. The scientists and horticulturists became increasingly disturbed when the accounting tools penetrated the organisation.

6.4 From 2007 to 2013: Introducing New Management Accounting System

As part of the Spending Review (Scottish Government 2007) at the start of the third Session of Scottish Parliament, the National Performance Framework (NPF) (2007) was introduced. Based on an 'input-output-outcome' instrumental logic, this multi-level framework underpins the delivery of the government's agenda. All Scottish NDPBs have to align their strategic objectives to the NPF and report in respect of the different levels of performance measurements. This framework has significantly influenced the design and implementation of the new performance management system in the case organisation. In 2008, the RBGE updated the balanced scorecard and strategy map which both linked to the Scottish NPF.

At this point, an overarching strategic system was functioning and most organisation actors were satisfied with the progress thus far. However, the performance management system continued to develop despite the benefits already served. If the characteristic of the previous phase could be identified as 'linking and engaging', this subsequent phase could be characterised as 'delegating and economising'.

At this point, the Director of Corporate Services, trained as a management accountant, was developing a new costing system which could match costs to strategic objectives rather than the traditional cost centres, this proposed costing system was named 'Strategic Objective Costing (SOC)' (Macnab et al. 2010).

To understand the new management accounting system, it is necessary to explain the funding arrangements of the RBGE. Funding is the limiting factor for public organisations. The funding the RBGE gets the funding in two parts: capital funding and revenue funding. Capital funding is provided from a separate stream and for specific capital investment purposes. Such funds are project specific so are normally depreciated using a chosen method over the lifespan of the project. Capital funding cannot be transferred to revenue funding therefore RBGE does not have the freedom to reallocate the fund. For the purpose of an internal management accounting system which provides information for decision-making, this source of funding although contributing to the achievement of strategic objectives, was not included in the design of the new costing system.

The new costing system takes inspiration from Activity-Based Costing (ABC) in the way that the system captures costs at activity level. However, different from a traditional ABC system where staff work only in their own cost centres, many staff members in RBGE work cross-divisionally and contributing to multiple objectives. To capture the cost of activities, first thing is to capture staff time allocated to different activities.

Annual funding of RBGE from the Scottish Government is £8.5m. The biggest component of the spending is staff salary and wages. This accounts for roughly 70% of the total funding (capital funding managed separately). The rest 30%of funding consists of various overheads. The spending pattern of overheads has been consistent over the years. Therefore, it is possible to predict and allocate the overheads using historical data. However, how staff spend time in different activities is much harder to predict. In order to get an idea of how much is spent on achieving a certain strategic objective, the Director of Corporate Services; an experienced management accountant developed a way of acquiring such information. Each staff member conducts a certain number of activities in their daily work. Activities are grouped

together under each strategic objective. Therefore, if the staff time spent on each activity is known, then together with staff salary information and the historical pattern of overhead costs, it is possible to get the total cost spent on each strategic objective. This system is labelled Strategic Objective Costing (SOC) by the Director of Corporate Services.

To obtain information on how much staff efforts are spent on activities, a staff time recording system (HR.com) was introduced. In this system, every member of staff was required to report the percentage of their time in each activity (see figure 12 below for a screenshot).

Figure 12 Time Sheet Template (internal system snapshot 2010)

Using information acquired through the time recording system and staff salary information, a total cost for each activity can be calculated as the aggregate of all staff salary attributed to that activity. Costs of different activities are then added up to strategic objective level to show how much resource (staff attention) has been spent on achieving strategic objectives. Using this method, it is possible to obtain the cost information of how much staff effort is spent on each strategic objective.
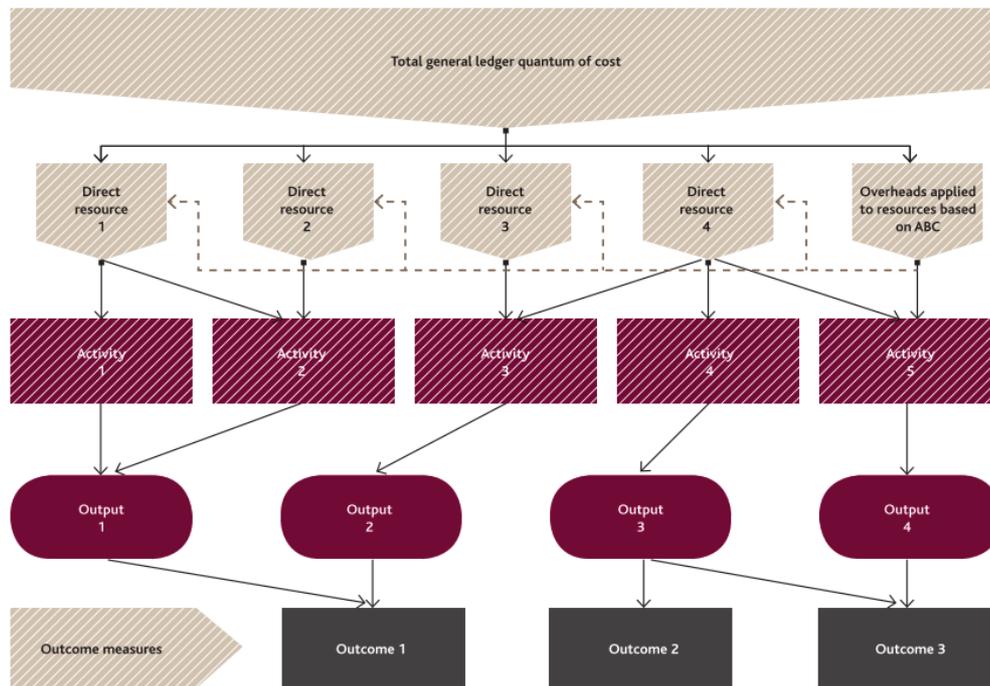
Figure 13 The Outcome Costing Model taken from (Macnab & Mitchell 2016)

To link the Balanced Scorecard, the strategy map and the costing model together, the Director of Corporate Services proposed that a software solution should be acquired to allow staff engagement. Several software solutions were considered and the Executive Strategy Manager (ESM) from the Palladium Group was selected.

In the Senior Management Group Conference held in 2007, Executive Strategic Management (ESM) from the Palladium Group, was chosen to support the performance management system under development, because of its multiple linkages within the software platform: a strategy map interface which could drill down to objectives, measures and initiatives at corporate and divisional level, and a Red Amber Green (RAG) traffic light system of visual alerts at strategic objective level (Macnab et al. 2010).

In ESM, the strategic management process started from the organisation's Balance Scorecard and strategy map. These macro visions could then be drilled down to objectives, measures at the divisional level. This system was web-based which allowed the divisional and departmental leaders to provide input on a monthly basis. This information was collected and put in the format of a performance report to be reviewed by the senior management team during their monthly meetings. Rather than one person producing all reports and performance information, this system allowed every department to write their own performance reports. The researcher's job description included collecting the information from HR.com, ESM and Finance to produce monthly performance reports.
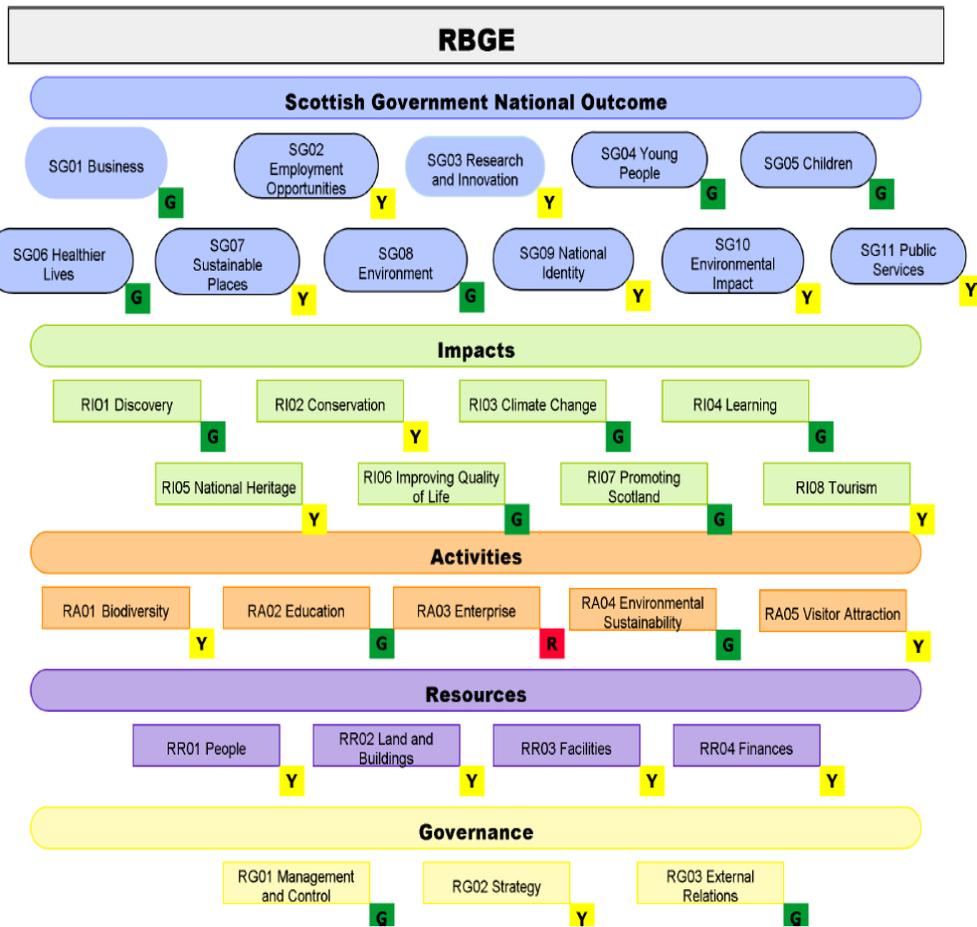
Figure 14 ESM System Snapshot of RBGE Scorecard RAG alerts Nov 2010

Y	SA 01 Biodiversity Status Caution	

	Objective Owner	
	* Mary Gibby	

SA01.01 Activity Costs – Biodiversity (Science)		

		Work Programs	
G	➡	SA01.02 Floras: Biodiversity Informatics
Y	➡	SA01.03 Floras: Flora of Nepal
Y	↘	SA01.04 Floras: CMEP
Y	↘	SA01.05 G&C: Conifer Conservation (ICCP)
Y	➡	SA01.06 G&C: Molecular Ecology
G	➡	SA01.07 G&C: Conservation and Ecology
R	➡	SA01.08 Crypto and Fungi: Bryology
Y	➡	SA01.09 Crypto and Fungi: Mycology/Lichenology
Y	↘	SA01.10 Crypto and Fungi: Phycology
Y	↘	SA01.12 Tropical: Environmental Change and Biogeography
Y	↘	SA01.13 Tropical: Evo/Devo
Y	↘	SA01.14 Tropical: Inventory Research in Threatened Areas
Y	↘	SA01.15 Tropical: Monographic and Phylogenetic Research
G	➡	SA01.19 China/JDFS Activity
G	➡	SA01.21 Herbarium Collection Research
G	➡	SA01.15 Edinburgh Journal of Botany

Figure 15 ESM System Snapshot of one Objective with work programs serving the Biodiversity strategic objective

With the addition of ESM, all individual components of the management accounting system were integrated into one system, which comprised a balanced scorecard, a strategy map, online performance management software, and strategic objective costing system. This entire collection was labelled Outcome Costing System. The system is demonstrated in figure 16 and figure 17. In figure 16, the starting point is all staff recording timesheets. Staff members could opt to complete the online time sheet in either percentages or hours. The system calculated costs based on percentages of total salary as the staff members were paid the same regardless of how they spent their working hours. Then the information from HR system together with finance cost information feed into the ESM system. ESM had a built in function of performing a Standard Query Language (SQL) query on the outputs from HR system and finance system. ESM then exported data to

Excel spreadsheets, which allocated salary costs, and non-salary overheads to all activities tracked. This information was fed back into ESM, which abstract the information up the scorecard system to provide costing information at strategic objective level. In this way, ESM system provided financial information to show how much has been spent on each strategic objective. With the performance information input from all heads of departments, ESM also provided non-financial information. In theory, all information relevant for senior management group decision-making would be in one place. Divisional directors can exert their influences on the staff time distribution to shift the staff working hours on achieving certain strategic objectives. This will then have an effect on the resources allocation (time allocation of staff) of the organisation. This system could provide both financial and non-financial information of any given work unit and a review of their activities. This level of reporting that was not possible before.
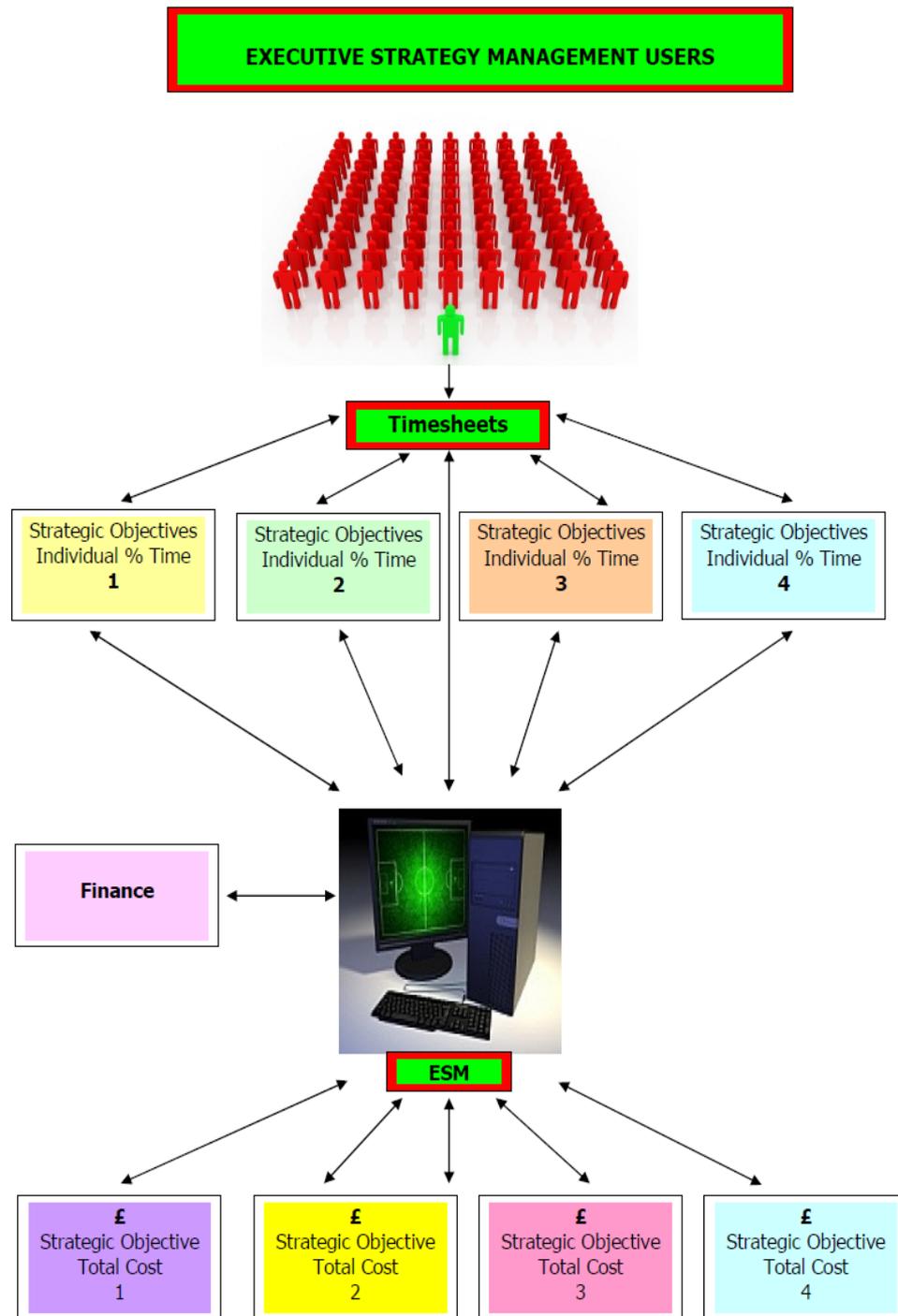
Figure 16 Strategic Objective Costing Process (internal document)
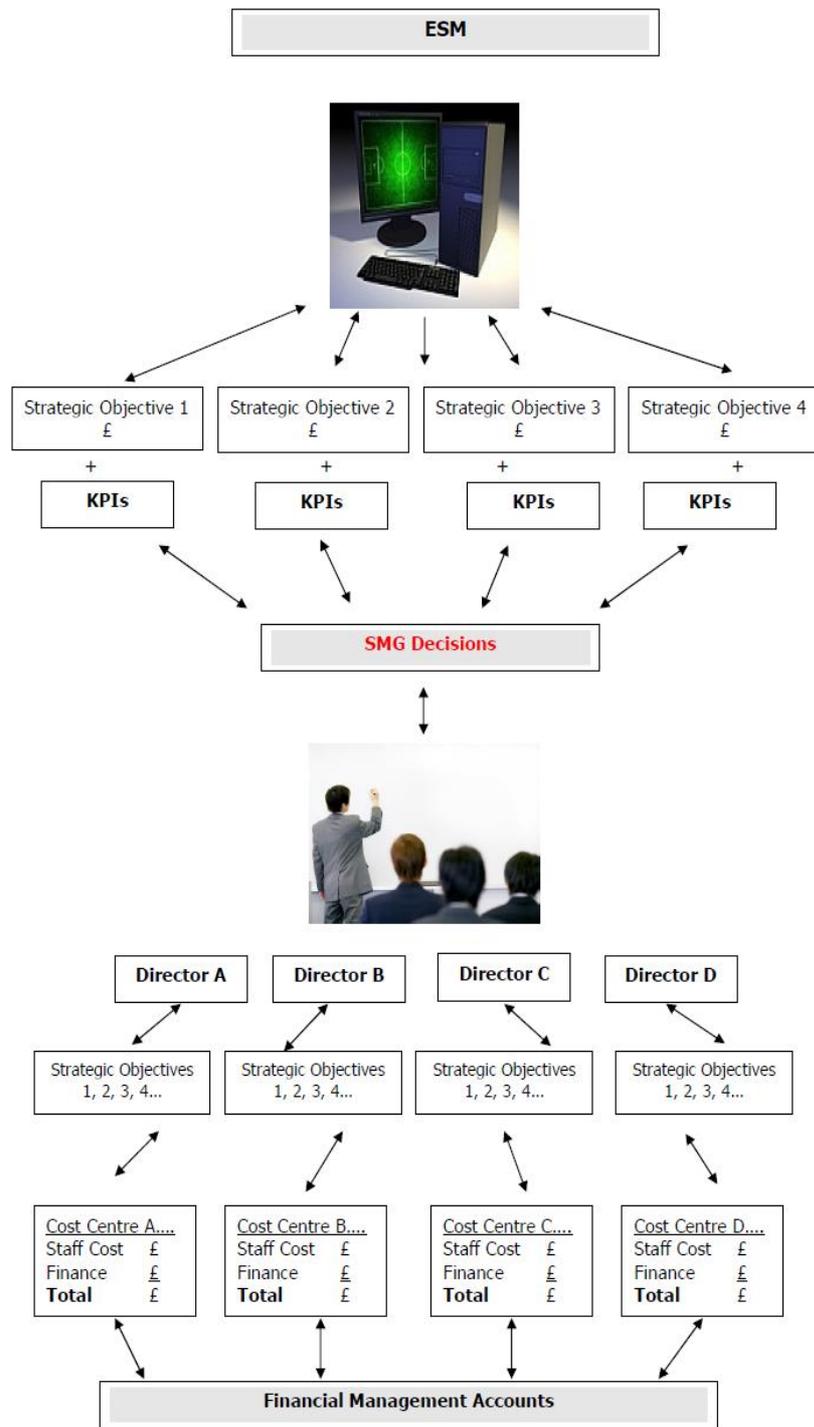
Figure 17 Strategic Objective Costing Process 2 (internal document)

Enabled by this system, new financial analysis could be carried out. One of the researcher's jobs was to produce such analysis. As shown below, with the costing information on strategic objective level collected for a whole year, it

was possible to reverse engineer the process to develop a system called 'Strategic Objective Budgeting (SOB)' which allocate resources to different strategic objectives depending on the relative importance of that objective that year.

RBGE

	Biodiversity	Education	Enterprise	Envir. Sust.	Visitor Attrac.	People	Land&Build ing	Facility	Mgt&Ctrl	Strategy	External	Absence
BUDGET	1972000	668000	436100	520300	2066000	284000	662000	1617000	892000	114000	157000	731000

SCIENCE

	Biodiversity	Education	Enterprise	Envir. Sust.	Visitor Attrac.	People	Land&Build ing	Facility	Mgt&Ctrl	Strategy	External	Absence
BUDGET	1416000	137000	195000	4000	494000	0	0	868000	162000	28000	61000	294000

HORTICULTURE

	Biodiversity	Education	Enterprise	Envir. Sust.	Visitor Attrac.	People	Land&Build ing	Facility	Mgt&Ctrl	Strategy	External	Absence
BUDGET	554000	530000	90000	31000	891000	0	12000	51000	224000	26000	49000	243000

CORPORATE SERVICES

	Biodiversity	Education	Enterprise	Envir. Sust.	Visitor Attrac.	People	Land&Build ing	Facility	Mgt&Ctrl	Strategy	External	Absence
BUDGET	2000	0	1100	485300	0	284000	650000	687000	421000	54000	11000	107000

ENTERPRISE

	Biodiversity	Education	Enterprise	Envir. Sust.	Visitor Attrac.	People	Land&Build ing	Facility	Mgt&Ctrl	Strategy	External	Absence
BUDGET	0	1000	150000	0	681000	0	0	11000	85000	6000	36000	87000

Figure 13 Budget Allocation to Strategic Objectives (internal document)

Further, costs and budgets could be allocated to work units and individuals. Each member of staff can be represented by a cost attached to them and their output can then be measured against this cost (illustrated in figure 19 and 20). For example, Staff A in the department of SB (Conservation and Genetics) in the Science Division contributed 25% of his time on RA01 Biodiversity and 35% of his time on RA02 Education. If the next financial period the senior management decided to carry out more education and less biodiversity research, in theory, they could potentially intervene by altering the individual's work pattern and time allocation and change those percentages.

Science Division / Cost Centre	Staff	£	Strategic Objectives / Staff	RA01 Biodiversity Time (%)	RA02 Education Time (%)	RA03 Enterprise Time (%)	RA04 Environment Sustainability Time (%)	RA05 Visitor Attraction Time (%)	Absence Time (%)
SB (Conservation and Genetics)	A	xxx	A	25	35	10	30	—	—
	B	xxx	B	50	50	—	—	—	—
	C	xxx	C	10	20	—	—	—	70
	D	xxx	D	20	15	10	25	30	—
	Total Staff Cost for SB	xxxx	Total Staff Cost on each Objective	xxxx	xxxx	xxxx	xxx	xxxx	xxx
	Total Finance Costs for SB	xxxx	Total Finance Costs on each Objective	xxxx	xxx	xxx	xxx	xxxx	xxxx
	Total Costs for Cost Center SB	xxxxx	Total Costs for each Objective by SB	aaaa	xxxx	xxxx	xxx	xxxxx	xxxx
SF (Floristics)	E		E	70	20	—	10	—	—
	F		F	50	20	—	—	—	30
	G		G	—	10	—	—	80	10
	Total Staff Cost for SF	xxxx	Total Staff Cost on each Objective	xxxx	xxxx	xxxx	xxx	xxxx	xxx
	Total Finance Costs for SF	xxxx	Total Finance Costs on each Objective	xxxx	xxx	xxx	xxx	xxxx	xxxx
	Total Costs for Cost Center SF	xxxxx	Total Costs for each Objective by SF	bbbb	xxxx	xxxx	xxx	xxxxx	xxxx
Total Cost for RBGE		xxxxxxxx	Total Costs for each Objective	aaaa+bbbb	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx

Figure 14 Linking Cost Centres to Objectives (internal document)

This costing information can then be linked to measurable output such as KPIs each staff member is contributing to, to see if they have been effective or if they could spend their time somewhere else more effectively.

Strategic Objective	Staff	Cost Centre	% time spent on the objective	£		KPIs	Monthly		Cumulative	
							Target	Actual	Target	Actual
RA01 Biodiversity	A	SB	25	xxx		RA01.02 Number of Accessions In Living Collection	34400	34962	N/A	N/A
	B	SB	50	xxx		RA01.03 Number of Recovery	N/A	9	N/A	N/A
	C	SB	10	xxx		RA01.04 Number of Publications	15	1	80	45
	D	SB	20	xxx		RA01.05 Number of Specimens in	2000	1446	4E+05	399074
	...	...	...	...		RA01.06 Value of Research Grants	N/A	5600	N/A	N/A
			Total Staff Cost for RA01	xxxx						
			Finance Cost for RA01	xxxx						
			Total Costs for RA01	aaaa+bbbb						
RA02 Education	A	SB	35	xxx		RA02.02 Number of Short Course	N/A	159	N/A	N/A
	B	SB	50	xxx		RA02.03 Number of Diploma	N/A	27	N/A	N/A
	C	SB	20	xxx		RA02.04 Number of Certificate	N/A	129	N/A	N/A
	D	SB	15	xxx		RA02.05 Number of HND Students	N/A	37	N/A	N/A
	E	SF	20	xxx		RA02.06 Number of BSc Students	N/A	18	N/A	N/A
	F	SF	20	xxx		RA02.07 Number of MSc Students	N/A	18	N/A	N/A
			Total Staff Cost	xxxx						
			Finance Cost	xxxx						
			Total Costs	xxxx						

Figure 15 Linking Cost Centres and Costs to KPIs (internal document)

Contrary to the staff reaction to the balanced scorecard and strategy map, the later development of the costing component of the management accounting system experienced high level of resistance.

Although in an intra-organisational turmoil, during this period, the system started to attract attention from professional bodies, governmental bodies and other public sector bodies. Several articles on the technical development and potential benefits were published in various academic and professional journals. The Scottish Government was particularly impressed by the system developed in the RBGE. The external recognition added to the momentum of the system to further penetrate the organisation.

By 2013, the system was deemed indispensable by the senior management. It has become the first point of reference that organisation members introduce to outsiders when asked 'what is the garden about'. And the new image and new way of looking at the organisation has been institutionalised.

Along with the further development of the accounting system, professionals became increasingly disturbed. Frustration and resistance gradually replaced their welcoming attitude in the first phase.

In the subsequent chapter, I start by describing the multiple institutional logics which affect and shaped the stated development processes to provide an explanation of the practice variation observed in practice. This could help to explain the changing attitude towards the new accounting system. The next chapter turns the attention away from whether the actors make 'good' or 'bad' use of the system or the system is a 'success' or 'failure', or whether it is a 'implementation problem' or a 'design' one. The focus is on explaining the problem at hand in a multi-lateral way. It is not just about the government reform versus public sector organisations, it is a story of multiple institutional logics competing, co-existing and blending with each other.

CHAPTER 7. THE CASE OF THE RBGE – PART II

INSTITUTIONAL COMPLEXITY AND ACCOUNTING

This chapter employs the lens of institutional logic perspective to analyse the management accounting change detailed in the previous chapter. More specifically, this chapter examines how multiple institutional logics co-exist and mix in the organisation before discussing how such institutional complexity shapes accounting change dynamics.

7.1 Institutional Logics of RBGE

Management accounting practice, such as performance management techniques, once seen as 'symbolic violence' to the cultural sector (Oakes et al. 1998), are now regarded as standard feature of public sector organisations such as museums, gardens, galleries. The spreading of a new 'rationality of planning' requires the use of performance management techniques as a means for reasoned justification (Townley et al. 2003), Rose (1991, p 673-674) notes that 'numbers have an unmistakable power in modern culture…by purporting to act as automatic technical mechanisms for making judgements, prioritizing problems and allocating scarce resource.' This attempt of 'programming the actions of professionals' has been perceived as unwelcome 'disturbance' to traditional professional values, and therefore, various forms of resistance have been reported (Broadbent et al. 2001; Broadbent & Laughlin 1998).

The invasive business-like logic has been sweeping through OECD countries since the late 1970s (Hood 1995). To align the state's aspiration and the effort of the professionals, management accounting techniques are used to translate

governmental objectives into visible and accessible technologies (Kurunmaki & Miller 2006; Rose & Miller 1992) making organisations 'thinkable' in a certain way (Hopwood 1987).

The overall impression on professionals in the public sector is that of doctors and teachers who actively organise themselves in resisting the 'accountingization' (Power & Laughlin 1992). However, as later studies note professionals can be unexpectedly welcoming towards management accounting change (such as, Barretta and Busco, 2011; Townley et al., 2003). The institutional and cultural dimensions have been identified and considered to be especially relevant and important in affecting and shaping how accounting changes are received (e.g. Burns & Scapens, 2000; Burns & Vaivio, 2001; Covaleski, Mark A.Dirsmith, Covaleski, & Dirsmith, 1988; Ezzamel, Hyndman, Johnsen, Lapsley, & Pallot, 2007; Lukka, 2007; Ribeiro & Scapens, 2006). Institutional research on accounting has revealed the varied nature of public sector organisations' responses to institutional pressures, such as the use of discourses (Ezzamel, Robson, et al. 2007), strategies(Edwards et al. 2005), tactics (Modell 2001), etc.

Organisations bring different professions with different logics together. Therefore, these organisations experience institutional multiplicity, examples include higher education publishing industry (Thornton 2004), accounting firms (Greenwood & Suddaby 2006), health care (Ruef & Scott 2008; Reay & Hinings 2005; Reay & Hinings 2009), social sector (Pache & Santos 2010; Tracey et al. 2011), professional services (Smets et al. 2012) and provincial government (Townley 2002). However, how the external demand for institutional change is operationalized over time within organisations with multiple institutional logics are rarely discussed.

Pache and Santos (2010) identified two main sources of institutional multiplicity: external demands and internal representation. The case

organisation is a hybrid with parallel divisions and experiences institutional multiplicity from both of these sources. The institutional multiplicity manifests in the institutional logics that 'passes through' the organisation and its members. This created a distinct context for the development of the system and at the same time shaped its development.

Each prevailing divisional logic is made up of two ideal types of institutional orders (Thornton et al. 2012) – the professional and the performance logics. With the new business logic coming in through the performance management system, three ideal types of institutional logics can be identified in this case organisation (See table 3).

Table 3 Ideal Types of Institutional Logics in the Field of Public Services Organisations

Characteristic	Professional logic (extant)	Governance (State) logic (extant)	Business logic (new)
Sources of identity	Profession	The State; Bureaucracy	Public sector bodies as business entities
Sources of authority	Professional expertise	Rules and Standards; Government regulations	Demonstrating Outcome; social impact
Values/rationality	Providing excellent services	Democracy; fairness	Output; efficiency; Value for money
Basis of attention	Recognition and legitimacy	Introducing new regulations, guidelines and frameworks	Provide information of interest/gaining recognition

7.2 External Demands of Institutional Multiplicity

The first source is located outside the organisation, from the broader regulatory, social and cultural environments – governance (state) logic. Organisations need to respond to external demands as they depend on external regulatory bodies for resources such as funding and legitimacy (Oliver 1991; DiMaggio & Powell 1983). RBGE is an NDPB and also a registered charity which has to comply with charities guidelines. Scottish Ministers appoint the board of trustees which oversees the RBGE and the Scottish Government provides a baseline funding to maintain the operation. The multiple external stakeholders led by the Scottish Government exert significant regulatory influence over the organisation. This influence is embodied in the organisation as a governance (state) logic shared by professionals working in the public sector.

Apart from a governance (state) logic, the requirement of introducing business-like practices and management techniques symbolises a new entrant of business logic.

These external institutional demands constitute the governance or state logic in the divisions to a different degree. The distance to the field level actors determines, to a certain degree, the level of embeddedness of the field logic (Greenwood et al. 2011). Delegated to manage the external relationships of the organisation, Division C is located closer to the external regulatory body, therefore, embedded more in a governance (state) logic than Division A and B. Division D as a spin-off of division C shares the same level of embedded with Division C.

As a result, professional logic is dominant in the science horticulture divisions while it is the minority in the corporate services division and the enterprise division.

Table 4 Institutional Logics Mix in the Parallel Divisions

Division	Science Division	Horticulture Division	Corporate Services Division	Enterprise Division
Prevailing logic	Logic of science	Logic of horticulture	Logic of 'means – end' (instrumental)	Logic of enterprise
Main source	Profession (scientist)	Profession (horticulturist)	Governance (State)	Governance (State)
Other source	Governance (State)	Governance (State)	Profession (accountant)	Profession (commercial)

7.3 Internal Representation of Institutional Multiplicity

With the wide variety of activities contributing to a collection of diverse objectives, the RBGE has always been structured as a hybrid with parallel divisions. Hybrid organisations have separate subunits with different mind-sets, educational and professional backgrounds and they promote different practices, norms and values, and conceptually each subunit is equipped with a prevailing institutional logic (Greenwood et al., 2011; Kraatz & Block, 2008). Different subunits enact different institutional logics within the organisations (Friedland and Alford, 1991; Scott, 2013; P. H. Thornton and Ocasio, 2008b). With distinct objectives and strategic priority, the four divisions in the case organisation could be conceptualised as four distinct players with competing and sometimes conflicting agendas. Their parallel structure results in their relatively independent status.

Division A has a focus on scientific research and the staff is mostly scientists and researchers. Hence a logic of scientific research prevails in this division.

It is a flat structured division with several research groups focusing on different areas of botanic research. Division A was not traditionally the biggest division with the largest budget until the last decade when scientific research was moved to the top of the agenda. The typical professional logic in this division is that of the scientist.

Division B contains the largest number of staff and its main purpose is horticulture. Division B maintains the world-class tourist attraction sites (the four regional gardens) as well as carrying out various environmental sustainability projects and education programmes. It consisted of staff with, on average; a lower education level and lower income level than Division A. Staff below manager level do not have a desktop or individual office space and the majority work closely with gardening tools. Division B has a traditional hierarchical structure and chain of command in its management activities. A strong logic of practical horticulture prevails in this division. The corresponding professional logic is that of a horticulturist.

Division C is the corporate services function of the organisation. It consists of finance, HR, estate management as well as IT functions. It is in charge of various external reporting and the management of relationships between the organisation, its board of trustees and the Scottish Government. Departments within Division C serve diverse functions and run parallel to each other without much co-operation. This division comprises staff with more transferrable skills. It has a higher staff turnover than the other two divisions. As new members constantly bring in new logics to an organisation and encourage a kind of logic 'blending' (Thornton et al. 2012), this division is least unified in the types of professional logic. As the least unified division in logic, logic of public service prevails. As the head of this division is an accountant, the typical professional logic is that of an accountant.

Division D was newly elevated to a separate division. Previously it was a department under Division C which later span off to become a commercial-oriented division. The majority of new staff members recruited in Division D after the spin-off have a commercial background. A strong commercial logic prevails in this division. However, this logic differs from private sector market logic in the sense that a great deal of income generation activities are for the purpose of funding key activities in the garden. The RBGE is a registered charity, thus the income generation activities are carried out like other third sector organisations. In addition to the income generation activities, membership management, fund raising and marketing activities are also carried out. We therefore label this prevailing logic the 'enterprise logic' and the typical professional logic in this division is that of a commercial manager.

In summary, with diverse goals and objectives, various activities, each division is equipped with a different professional logic and a different level of the governance (state) logic. (See Table 5)

Table 5 Different Divisional Professional Logics in the Organisation

Characteristic	Professional logic - Science	Professional logic - Horticulture	Governance/ performance logic	Commercial/business logic
Identity	Scientist	Horticulturist	Public servant/ Stewardship	Professional managers
Goals Objectives	Contributing to science contribute to knowledge	Curation Horticulture Excellence	Resource management Stewardship Satisfy statutory requirements	Income generation Membership management
Core activities	Research publication	Garden maintenance/ design/construction	Provide information Producing reports	Marketing Fund raising trading

Basis for recognition	High quality scientific findings& publications	High visitor attraction rating/rare species curation	High quality information; Recognition by Sponsor agency	Revenue; Membership; Raising RBGE profile
Number of staff (2012)	64	89	28	36
Structure	Flat	Hierarchical	Mixed	Mixed
Training	Academic	Vocational	Academic; Vocational	Academic; Vocational

7.4 Institutional Multiplicity and Variations in Interpretation

The management control system including the BSC, strategic map, costing and budgeting system, was designed and developed into a tool, which is capable of providing benefits to both internal actors and external actors of the organisation. (See figure 19 below) However, different divisions received the same system in different ways. As different divisions and members are embedded in different institutional logics to a different extent, the interpretation of the new system can be a mix of the three ideal types of interpretation.
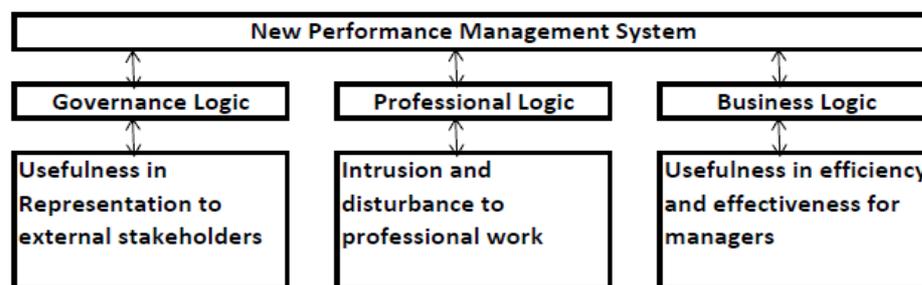

Figure 16 Different Interpretations of the New System with Different Logics

Despite the management information that the system was able to provide, no evidence of use in practice to improve efficiency and effectiveness was found. Looking at the organisation as a whole, people generally agreed that it provided a picture of 'what everybody else is up to' (Director 5) and it constituted an attractive reporting tool, which would satisfy government. Surprisingly, professionals from different divisions interpreted the system through their extant logic, rather than the business logic that the system strongly symbolises. This finding echoes proposition two in Ezzamel, Robson and Stapleton (2012) in their study of the budgeting practices in education field that

> *'Organisational actors disadvantaged by the introduction of new budgetary practices will align interpretations of budgeting with older logics' (p. 301).*

And their proposition four which asserts that:

> *'Through reforms, budgeting practices in a field come to reflect the influence of logics other than the logic that propels (symbolically) their entry into the field' (Ezzamel et al.2012 p. 301).*

In the implementation of the performance management system, the professionals in the Science Division and the Horticulture Division, disadvantaged by the new practices, aligned their interpretations with their extant logic of governance (See figure 17).

As a public sector organisation, the governance (state) logic was inherent in all actors in varying degrees. Less embedded in the logic of governance (state) than the other two divisions (see table 4), the logic of governance managed to have cleared the way for the entrance of the new system which symbolised a new logic of business to the field. Although the new system symbolised business logic, it was motivated and sanctioned by the state. Therefore, the professionals dismissed the business logic symbolised by the

system and focused on responding to the logic of governance (state), satisfying the bureaucracy and only recognised the usefulness of the system in its power of representation.

When the professionals interpreted the system in the logic of governance (state), they accepted that they needed to do something to satisfy the government. As they were partially embedded in the governance (state) logic as public servants, they accepted the obligation to report:

'If not this (the system), it would be something else'.
(Scientist 3)

'I think some of the information we are collecting is probably very useful for emphasising the relevance of the institute externally... If we can provide the information that says we are important and we are relevant and we need funding that's good. And I'm happy to provide those figures….'
(Scientist 6)

However, they did not believe one set of information collected in the system could be both meaningful to the internal and external users of the system.

' We are using the number to feed out to people that we think people would be interested externally but there are not necessarily the numbers that we internally use to plan. We are too busy collecting the information so we don't have time to do anything with it. ' (Scientist 6)

When professionals interpreted the system through professional logic, they felt threat and disturbance. They reconciled their interpretation through professional logic and governance (state) logic and concluded that the system can be useful as a tool to defend professional freedom.

Scientists interpreted the introduction of the new system as the organisation's strategic decision to accommodate the ever tightening control

from outside and above. Therefore, they believed that the purpose of the system was a modest representation to keep the government at bay. The increased amount of administrative work caused frustration. The scientists considered that they had more important things to do. However, they had to comply because academic freedom was at stake:

> *'I find that very frustrating and I think we are doing this extra work, because for me it is extra work… And I think that's a frustration.' (Scientist 6)*

Members of the Horticulture Division, on the other hand, also interpreted this new system as another layer of bureaucracy which was a necessary aspect of life of a public organisation. Instead of actively resisting and delegating the responsibility to individuals, the senior managers in this division decided that the most efficient way of dealing with this bureaucratic imposition was to report collectively to satisfy the minimum requirements. The senior managers spent a couple of hours every month with the director's personal assistant to fill in every page of the system. In this way, other staff were shielded and protected and able to carry on their previous work routine. Senior managers thus assumed the responsibility and absorbed the external pressure placed on their colleagues:

> *In respect of ESM, I'm the 'buffer'. I think of myself as the 'buffer' from all these external demands (for my staff)…. So all of this is largely for political reason, if all that we are doing is means to an end (the information requirement from above), which is fine. But it is not a management tool. (Senior Horticulturist 1)*

> *'I've always asked the question, is this system a reporting tool or a management tool? It doesn't work as a management tool for us…. It (the system) does not do anything for me, but if it keeps the Scottish Government happy, if they are happy then I'm happy. ' (Director 3)*

As we have seen, the Corporate Services Division and Enterprise Division were dominated by governance (state) logic (see table 4). They were advantaged by the new management accounting system. As supporting divisions, they were placed on the same platform as the functioning divisions and they aligned themselves quickly with the new system. The Corporate Services Division had the timeliest reporting into the new system (ESM) on a monthly basis. Quality was good and with appropriate amount of details. Enacting the sources of their logics (see table 4); staff interpreted this system as another layer of control, which was necessary for satisfying the government. Therefore, few challenges from staff were encountered. Also aligned with professional logic, the system signalled improvement and innovation in reporting techniques. As a result, the system was a source of pride for managers in these two divisions. Following implementation, they reported in a timely manner but also claimed that they attempted to utilise the system more closely to facilitate their everyday operations although they had limited success. These two divisions embraced the system with a more positive attitude.

> *'The ESM system provides highly accessible and widely disseminated performance and financial information. The financial systems at the Royal Botanic Garden Edinburgh are complex due to the requirements of company and charity legislation, the government accounting regulatory framework and the multiple information needs of the many grant awarding bodies that fund our work. The ESM system provides extensive performance and financial information which is accessible to all staff and provides a high level picture of where resources, particularly staff time, are being utilised.' (Senior CSD Manager 1)*

> *'ESM is an exceptional business tool, allowing managers to view strategy performance at a glance. Combined with the Strategic Costing System, decisions on cost centre budget allocations and future strategy development can be made, using up-to-date factual information, saving both time and money.'(Director 5)*

These mixed responses to the management accounting change could be explained by the different levels of embeddedness in the governance (state) logic. For example, like the medical professionals, scientists are less embedded in the governance (state) logic and therefore, tend to interpret the changes through their own professional logic. And they are likely to interpret the business logic represented by accounting as intrusion. Meanwhile, other professionals, like accountants and commercial managers working in the public sector are more embedded in the governance (state) logic, therefore, are more likely to accept changes which are likely to bring more legitimacy and resources to their organisation.

7.5 Unintended Disturbance and Instability Caused By Institutional Conflicts

The accounting devices facilitated competition of interpretation amongst divisions. Before 2007, the organisation responded to the governmental requirement as a whole. The performance management practice was designed to present the organisation to sponsoring department and other stakeholders. This activity was carried out by only a small number of employees on behalf of all staff. There was an implicit agreement between professionals who promoted the system and those who resisted the system that the main purpose of the system was to deal with the external pressure as a whole. However, as the system cascaded down to lower level, this consensus fractured. The scope for decoupling was diminished.

With the further use of accounting devices (ESM and the new costing system), the reporting responsibilities were cascaded down to divisional level, departmental level and subsequently individual level. This caused the professionals to experience an unanticipated disturbance and instability in the organisation as a whole.

Prior to the introduction of this system, professionals gained legitimacy and credibility from their respective fields. For example, scientists enjoyed freedom in research as long as they produced a certain number of oral or written papers a year to their supervisors. Now, with the system in place, this arrangement was no longer adequate. A new accounting platform was put in place which encouraged various professionals to compete and demonstrate their outcomes in a way determined by accounting devices. In order to justify the budget allocation, all divisions now had to deploy the language of the new performance management system, demonstrate the relevance of their activity in relation to the organisation's balanced scorecard and the National Performance Framework (2007).

The professionals not only had to demonstrate their work to colleagues but also external stakeholders in a number of ways on a number of occasions, often in relation to the same activities. The preparation of multiple accounts took a significant time beyond their established work routines and schedules. In consequence, the tool designed to improve service delivery ended up compromising the service being delivered.

Professionals embedded in professional logics with fewer homologies with the logic of governance (state) exhibited stronger resistance and offered more challenges to the new system. Scientists and horticulturists were now obliged to demonstrate their contribution and achievements through the same system and using the same vocabulary to that used by the accountants and commercial managers (See table 4). They felt more pressure due to the need to justify their work and fight for legitimacy of their work. Not surprisingly, the study found that scientists and horticulturists expressed more doubts and frustration with the system than accountants and commercial managers. This echoes proposition 3 in Ezzamel, Robson and Stapleton (2012) that

> *'Conflict between logics in a field is mediated by the homologies between the logics within the field and the logics outside of the field that propel new logics into a field'* (p. 301).

Professionals such as scientists and horticulturists are embedded primarily in their respective professional logics which are further distant from the logic of governance (state) than the accountants and commercial managers. As a result, they were greatly disadvantaged and disturbed by the new management accounting system. Many scientists admitted that they only interact with the system once a month when they absolutely had to deal with it to satisfy the minimal external requirements.

> *'I used to have to fill in a bit on the ESM system, and I don't do that anymore…That just seems so ill defined, that umm, it's a case of bad data in and bad result out. It doesn't seem to me worth doing.'* (Senior Scientist 5)

> *'The main area of conflict is when somebody suggests that the data you are gathering is going to answer your question (to be useful in practice). And as a scientist I disagree with that….'* (Senior Scientist 4)

Promoted as a heuristic management tool with the potential to 'tighten up' the parallel organisation, the system generated segregation and tension rather than unity to the organisation. It also, to a certain extent, damaged the relationship between managers and staff. Professionals felt much less valued as a result.

> *'They told us the rational, but if you don't agree then, that's the end of the discussion…. In this case, it seems our opinion was completely unwanted.'* (Senior Scientist 3)

> *'The natural thing for me to do is to keep my heads down and satisfy the bureaucracy as much as I can. I operate under my own work ethos.'* (Scientist 7)

The employment of computer based program deepened this segregation.

> *'So I think a lot of management was taken over by the ESM program. It seems to allow managers to shut themselves away. They seem to assume by looking at their computer screens and not by talking to the staff… Even only for two or three minutes and they don't, they choose not to which I think is probably damaging in the long term. And we have to employ a person to run the system which is I think is a waste of money.'* (Senior Scientist 5)

With the increasing penetration of accounting devices into their work, it became difficult for the professionals to satisfy the professional logic by doing their job as well as fulfilling the obligation under the governance (state) logic by spending time to demonstrate their work achievements. Professional logic and governance (state) logic were put on the platform for competition. The coexistence of the two logics was pushed to the edge by the increasing use of the accounting system.

7.6 The Tool Becomes the Master - the Unintended Means and Ends Flip

From the first attempt at producing corporate plan to the use of a fully-fledged performance management system; the RBGE has experienced increasing 'programing' through the introduction of new accounting devices. The impact of the change is much more sophisticated.

The increased use of accounting has compromised the public service delivery. And the implementation of the system has resulted in more segregation than unity. It has become impossible to think of the organisation without referring to the implemented system as it provides an organisational image that no other devices could. Even for employees who have been there for more than 20 years and deeply embedded in their own professional logics, the new image of the organisation started to inform their cognition. It has become 'the way' to think about the organisation.

Although the various professional groups agreed that the system had more use in representation than in practice, the possibility of not engaging with the system has been gradually eliminated. The accountants somehow trapped in their own devices started to believe that eventually, with more and better accounting devices added to the system, it would become a 'true heuristic management tool'. But the tool has unintentionally become 'the tiger that no one can tame'. Rather than fulfilling the role of a tool for management, it has become the primary concern for the management to maintain its appearance. The failure of the system would implicate more reputable damage to the organisation.

Leading this management accounting innovation has won the organisation recognition from and beyond the Scottish Government. This external recognition has legitimated the existence of the system and justified further investment of resources in it.

As a result, more resources went into the maintenance and development of representations rather than the service itself. Instead of supporting professionals in carrying out their work, accounting became more and more pervasive in the organisation, professionals felt marginalised in this process. The supportive nature of accounting faded. The increasing size of corporate services functions in the public sector is a common phenomenon.

> *'Corporate Services burgeoning over the past 10 years, while we are still carrying gapped posts. There are constant conversations among my colleagues about this.' (Senior Horticulturist 1)*
>
> *'Since I've been here which is now 20 years, I've seen position of the head of corporate services, the garden secretary that position used to be known, has raisin to be equal now to the head of science and head of horticulture. And this seems to me and I'm sure to quite a number of my colleagues, anomalous that to what you might call a productive division, the ones that doing the science and doing*

the horticulture are sometimes being out voted by the one who's supposed to be making sure we run correctly.' (Senior Scientist 5)

In the case investigated here, government regulations brought new business practices into a field dominated by professional logics with a view to increasing 'efficiency, transparency'. In practice, the new system is not interpreted in the context of the intended new business logic. Rather, the professionals align their interpretation with extant logics – the logic of governance (state). Therefore, the need to focus the limited resources on representation of the organisation's work left the potential benefits for practice barely explored. The government assumes that such systems could not only align the professionals and the state, but also improve the representation and the practice. In practice, this was not the case.

Although professionals in the case organisation agreed that dysfunctional consequences started to emerge following the implementation of accounting devices, from an observer's perspective, the change was set on a deviant path from the beginning. The need to satisfy the Scottish Government and the board of trustees appointed to the RBGE, the purpose of legitimacy seeking was imprinted on the system since day one. As a result, it was impossible for any subsequent introduction of accounting techniques to be functional solely managerially. The usefulness of the system in representation defied its usefulness of it in practice. This finding contrasts with the textbook understanding of management accounting as a reporting tool and management tool at the same time. In the institutional context of the case organisation and its field, it is impossible for the professionals to treat it as both.

This research also provides a contrasting image of professionals' attitude towards business-like practices, such as accounting. Compared to the earlier studies in the 1990s and early 2000s (e.g. Broadbent and Laughlin, 1998;

Broadbent et al., 2001), professionals' reaction can be mixed and can change dramatically in a short space of time. In the case under investigation, a dramatic turn was caused by the decision to introduce one accounting device (ESM). Professionals' reaction to the entire system changed to negative from positive.

Grounded in institutional multiplicity, this study provides an alternative perspective to the growing literature on complex performance management use in the public sector. Viewing the organisation as a collective of different professionals specialising in different tasks, the study moved beyond the common norm of 'hypocritical' management techniques imposed on public sector organisations coercively. Institutional logics perspective proved to be useful in teasing out the complexity of the organisational change, especially the micro processes. However, professionals in this case study can exhibit more fluidity in the degree they are embedded in different logics. In other words, the compositions of various institutional logics are constantly changing. Although institutional logics helped explaining behaviour in the longer term, this framework showed its limit in explaining sudden and unusual behaviour.

Another interesting aspect in this case study is the small group of professionals (accountants) and how they switched sides when the accounting system got recognised beyond the organisational boarders. Several professionals with expertise in performance management delegated to carry out performance management system design and implementation in such organisations can blur the line between 'de-coupling' and 'coupling'. In such circumstances, the new system is likely to disturb the long-established power balance and this could have implications for actual service delivery by other professionals in the organisation. The small group of professionals delegated to deal with external institutional demands, filtering institutional pressures are located in a crucial position in the entire change process. This

small group of professionals are equipped with knowledge of multiple institutional logics and are in a position with potential to promote (unintentional) institutional change. This area could be fruitfully explored further.

At the beginning, the minority logic (performance logic) holders were facilitating the work of the majority (professional logic). Over time, the new system comprised multiple accounting devices facilitated the unintended disturbance of professionals and caused organisational instability while promoting governance (state) logic. As a result, professional logic and governance (state) logic were put to competition. This has compromised the quality of public service delivery.

This unintentional consequences caused by the change process could lead to means and ends flip. The tool (accounting devices) for the organisation could take centre place in organisational life and distort the aim of the organisation in the long run.

According to the managers, the most desirable features of management accounting inscriptions in this context is that they link various activities, resources and stakeholders together on one page. However, it is necessary to be aware that the link is subjective and the different types of relationships between the linked are overlooked.

Because of this feature, the inscriptions are not relevant to day to day operation therefore it is easy for the organization members to put aside unless the managers need to justify decisions or fill in reports. This has provided an explanation for the difficulty in pursuing the active use of management accounting techniques in the public sector. As the management accounting inscriptions do not address various types of institutional complexity, the organization members can only recognize the usefulness of the inscriptions in making links between different actors and providing a

streamlined model of rationality. However, the usefulness of inscriptions will probably be limited to this as the inscriptions do not have the qualities that the internal members of the organization require.

Important policy implications can be drawn from this case study. Although organizations might be actively embracing the idea of employing new management accounting techniques, especially the use of inscriptions, the crux of the problem lies in the nature and qualities of management accounting inscriptions. The pursuit of visibility could lead to a different image being portrayed and organization being more opaque when the audience of the inscriptions believed what they see is real.

The new image also signalled ideology change in the institution, contributing to the trigger of change in professional individuals' mentality. The role of emotion and sense of belonging in institutional change is explored in the chapter nine.

Another aspect of the findings on visual inscriptions in this case suggests that the quality of adaptability of the management accounting inscriptions (BSC and strategy map) is crucial to its survival and transmission. They can be designed and re-designed, as it happened in the case organisation over the past 10 years, so the idea of discarding the device became more and more unthinkable. The ability to accommodate the requirements for changes is key to the survival of the inscriptions and this ability makes it possible for them to stay around long enough to be taken for granted, hence contributing to institutional changes. This finding is in line with literature inspired by Actor-Network Theory and 'boundary objects (Star & Griesemer 1989)'. Therefore, although the version of BSC in the case organisation has been modified and lost its crucial characteristics of the original design by Kaplan and Norton (Kaplan & Norton 1996), being able to sustain the identity of BSC is crucial for its legitimacy and survival. Another crucial dimension of visual elements

is the ability of the institutional entrepreneur to manipulate such visual inscriptions to frame changes in a way that enables and promotes change. This aspect is explored in detail in the following chapter.

CHAPTER 8. THE CASE OF THE RBGE – PART III

INSTITUTIONAL ENTREPRENEUR AND VISUAL

FRAMING

There is an important theme emerging from the data analysis – the visual power of management accounting tools, such as the Balanced Scorecard and Strategy Map. The institutional entrepreneur's skill in mobilising visual inscriptions is important in promoting changes. This chapter investigates how institutional entrepreneur using visual framing with accounting inscription can promote management accounting change.

8.1 The Power of Visual Inscriptions

Visual inscriptions are socially created, manipulated material objects, which are constitutive part of social practices. The use of such objects can play an important role in social processes such as the management accounting process under investigation in this organizational context. They can also be strategic which are symbolic devices that can influence audiences' perception and often, can act as persuasion devices (Meyer et al. 2013).

Accounting studies have acknowledged the role of artefacts in accounting change. Accounting inscriptions have power because their rhetorical and persuasive nature. Quattrone (2009) explored the conditions of the emergence of accounting technique and the conditions, which allow it to diffuse. Four interrelated aspects were identified: "the nature of accounting as a method of classification for the organisation of thinking and knowledge; its reliance on images and its visual impact; its 'orthopraxis' nature which

offers a workable space and time; and the relationships between accounting and the medium through in which it materialises (Ibis, p. 85)". The power of the accounting inscriptions and their ability in making new links between various actors made the institutional change and power shifts possible (Quattrone 2009).

In a later article, Quattrone and colleague investigated the power of visual inscriptions, such as BSC, and conceptualise that they are a 'force and process' which enable innovation, coordination, competition as well as motivation (Busco & Quattrone 2015).

Organisation studies have also explored the important role of visual presentations and the difference between verbal languages and visual mode of communication. Four core propositions were made to explain the power of visual representation (Meyer et al. 2013):

Firstly, "the verbal and the visual mode of meaning construction both materialize, organize, communicate, store, and pass on social knowledge with in particular communities. They both constitute complex systems of symbolic signs and are able to build up and organize zones of meaning (Ibis, p. 494)".

Secondly, "the verbal and visual mode of meaning construction both contribute to a society's social stock of knowledge and are, thus, part of an objectified social reality. The use of visual artefacts – similar to verbal text – serves to create, maintain, and defend particular forms of practice and the particular forms of knowledge that underpin them (Ibis, p. 494)".

Thirdly, "the visual mode of meaning construction... is characterized by a prevalence of holistic and immediate information, rather than linear and sequentially arranged information (Ibis, p. 495)".

Fourthly, "visual representation can objectify social arrangements and socially constructed realities through the absence of predication, explicit logical conjunction, and grammatical mood and through its capacity for accurate and detailed depiction (Ibis, p. 495)". This visualizing power together with the economizing power of accounting could influence organizational and institutional changes (Meyer et al. 2013).

Constructivist research has extended the institutional approach, especially on the ambiguity of management accounting inscriptions and how they enable institutional change (Modell 2009; Dambrin & Robson 2011). Especially, this approach has highlighted the fact that the management accounting inscriptions are not merely tools used by organizations in an objective way, instead, these inscriptions offer a specific way of viewing the organization so that it in turn affects the organization in, often, unexpected ways. The organizational life is reduced into devices and inscriptions such as balanced scorecards and performance measures to enable control at a distance (Robson 1992).

Some studies look specifically into one type of popular device, such as the balanced scorecard investigating its power in visual representation and rhetorical power (Qu & Cooper 2011; Nørreklit 2003; Free & Qu 2011).

However, it is unclear how power of accounting inscriptions are harvested by institutional entrepreneurs and used to promote his/her change agenda. This thesis proposes the concept of 'visual framing', which is used by institutional entrepreneurs to promote their change agenda.

8.2 Visual Framing as Repertoire of Institutional Entrepreneurship

Coming from media and communication studies, visual framing is powerful in shaping the way a particular problem is defined and interpreted (Rodriguez & Dimitrova 2011).

In the case of RBGE, the accounting inscriptions are used by the institutional entrepreneur, which contribute to framing some aspects of institutional complexity out of the audience's attention.

First, the streamline structure of the balanced scorecard and strategy map ignores the complex co-operation between departments in delivering complex tasks. For example, the objective 'education' requires input from both Science and Horticulture divisions. To deliver education programs, both scientists and horticulturists have to take time out to design lectures, compiling programmes and materials, supervising students as well as other related tasks. These tasks are in conflict with delivering some other tasks, such as research and garden maintenance. By defining the relationship between activities and objectives in a linear way, the institutional entrepreneur left the heterogeneity of the relationships out which made the inscriptions simple and logical enough for easy acceptance.

Secondly, the visual framing also hid the time dimension of management accounting. There were constant trade-offs when managers in the case organization decided to assign resources to tasks. Not all objectives are being delivered at all times. Some activities had to be prioritised in the allocation of resources simply because they are the predecessor of other activities. Some objectives are strategically more important than some other. The use of visual framing left these dimensions and difficulties out of the picture so that they are accepted.

Thirdly, some things are easier to make visible than others. The institutional entrepreneur had to make a choice. For example, the professional logic is more difficult to make visible through inscriptions than state/managerial logics. It is normally more difficult to value a rare plant specimen in the herbarium than the number of visitors. The same logic applies when the organization is trying to design its performance measurement system. Some aspects of the organization got better representation than other aspects. More than often, the more invisible aspects are central to scientific and cultural organizations like the RBGE. However, by choosing to use visual framing in promoting changes, the invisible aspects are avoided for easy acceptance.

The new type of control signalled by the management accounting inscriptions framed with a streamlined logic of input-output-outcome is forcing professionals to rethink their work and how to allocate more time towards the tasks more easily measured.

Consequentially, with the approval from the Scottish Government, the senior management will tend to rely more on these visual framing and try to make them work. This will result in a contrast between the complexity that is experienced in the organization on a daily basis and that of simplified image provided by seemingly logical inscriptions. This creates difficult for management and this could provide an explanation for the symbolic and decoupled use of management accounting techniques including various inscriptions such as balanced scorecard and logical framework. This case study has shown that the active pursuit of visibility by the case organization with goodwill can result in a paradox situation for the organization. The external approval made the use of management accounting inscriptions more indispensable to the organisation for legitimacy reasons. However at the same time, because of the visual framing and its hidden complexity, the organization was stuck with the inscriptions and constantly trying to make them work but kept failing to do so.

The development and promotion of visualisation of organisational strategy and objectives can be important resource for culturally embedded actors to become potential institutional entrepreneurs. As the case finding suggests, the ability of using visuals to promote organisational change is an important skill of the entrepreneur – the Director of Corporate Services Division.

In this case study, the institutional environment contributed to the change by presenting the problem of the public sector reform, which asks for more efficiency as well as more transparency and accountability. On an international level, New Public Management has been an on-going trend for decades. The UK government has pushed public sector reform since the 1980s and the adoption of private sector managerial techniques is regarded as better practice (Hood 1991; Hood 1995; Lapsley 2008). The institutional environment creates normative and sometimes coercive pressures on the case organisation to adopt performance management techniques. From an institutional perspective, one of the main causes of accounting change is the operation of multiple external institutional forces. Organisations adopt accounting systems or make changes not because of technical requirements but to comply with external institutional requirements. However, this cannot explain all the case findings. The change did not happen until someone with the necessary skills to make it happen. And one of those important skills is the use of visual framing.

To take an opportunity and turn it into a thorough and radical organizational change, we have to regard the individual ability of institutional and cultural entrepreneur and their use of various devices to pursue the goal of change. While the adoption of new techniques as contingent on the local and global recursive discourses coinciding with local possibility of action (Hopper & Major 2007), some local initiatives lead to more radical changes than others. This case organisation falls into the former category. Coincided with the managerial pressure for strategic planning, the senior management team was

faced with a problem of lack of expertise. The institutional entrepreneur recommended the development of a strategic tool, which resembles that of a balanced scorecard and over time, he led the development of an accounting system to further the change process. He believes that the accounting innovations could provide better managerial information, which would improve resource allocation efficiency and strategic governance.

The use of visualisation (the BSC tool and the strategy map) facilitated the entrepreneur to get other parties interested. As a popular business tool developed for the private sector originally, the balanced scorecard managed to get some senior management interested however, as a scientific organisation, there has been a strong antipathy to business terminology. The institutional entrepreneur therefore redesigned the balanced scorecard and customised it in order to get it fully 'domesticated'. Apart from taking out all commercial terminologies, a fifth perspective was added to the balanced scorecard on top of the four existing perspectives – the Scottish Government' National Outcomes. This has shown the importance of the skill and expertise of the institutional entrepreneur in the promotion of the change. The use of image and design facilitated the entrepreneur. The ability to use visuals to facilitate and frame the strategy greatly lowered the barrier for the new version of the strategic tools being accepted.

The visual framing enabled the organisation members to view the strategy of the organisation 'all on one page' by illustrating organisational input to output, to strategic objectives, impacts and to the governmental objectives. Senior managers were particularly glad about this development as it enabled them to view strategic performance at a glance. They also expressed their approval of having such a framework to assist with ensuring that the organisational activities were properly aligned with the organisational objectives, and further with the government agenda.

The visual devices proved to be extremely helpful in locking down allies. Potential pro-change actors from other division could be identified from their responses towards the balanced scorecard and the strategy map. The entrepreneur would then work with them to further promote the change.

Since 2010 when the computer based system designed based on the BSC and Strategy Map was updated to the current version, the entrepreneur encouraged all input. The purpose was to engage people to work with this system. Technical support was provided on a full time basis. During this period, the risk of 'decoupling' was ignored. The purpose is to get maximum involvement and form a reporting routine. The position of the entrepreneur also proved to be crucial to promote change. As the entrepreneur holds senior management position, he had the authority to allow 'decoupling' and being able to control the quality of the input are important here as it gave him the freedom to intervene and correct at a pace that he was happy with.

In 2011, the input from different actors reached a satisfactory level deemed by the institutional entrepreneur; he started to pay more attention to regulating the quality and the quantity of the input by other divisions. Meanwhile, incremental changes were made by the entrepreneur to regulate the input to more strategic reporting and less day-to-day narratives.

In late 2012, a major 'slim-down' was made to the software system. Only strategic level reporting was permitted. There is a subtle balance between the amount of rules and resistance. By introducing more rules, the entrepreneur could make other actors' input more strategically useful, which would make the whole system more relevant to management. Then the positive feedback could lead to more people accepting the system. However, introducing more rules and conducting more interruption would induce more reluctance, which would lead to actors' intentionally lower the quality of input. Meanwhile, if the entrepreneur introduced less rules, then the input would

have little value or relevance to management, which would then undermine the potential of the entire system.

At this critical stage of the change, the institutional entrepreneur mobilised the change and succeeded in gaining external support from the government and other public organisations. This recognition further reinforced the belief that this system was beneficial and had great potential for the entire organisation.

Six articles were published in various professional journals written by the entrepreneur. He also presented this innovation in various meetings with government officials as well as external visitors (also international visitors). Numerous conference presentations generated great interest from external parties. As the innovation was gaining more recognition within the UK, the entrepreneur also embarked on a serious of business trips during 2010 to 2013 to disseminate this system and its achievement internationally[6]. These achievements brought the entrepreneur credibility, which helped to settle controversies and challenges from the anti-change actors. It also satisfied the innovation's need for legitimacy. During this process, the institutional entrepreneur gained significant field level support and this has translated into the progress of the change process.

Combining with other social skills already mentioned in the literature, the ability of using visuals as a framing device greatly adds to the institutional entrepreneur's ability to influence the change process. Using visual devices in this case helped the institutional entrepreneur deal with the institutional complexity involved in this organisation and helped mediating various

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[6] The inventors of the balanced scorecard, Kaplan and Norton met with the innovator during his trip to America. Subsequently, they both came to the case organisation for a celebration of the 20-year anniversary of the balanced scorecard. During his visit to the USA, a number of gardens received his presentations about this innovation. He also visited Chinese Academy of Sciences in Beijing, Singapore botanic garden, etc...

interests. Visuals are part of the cultural and social toolkit, which entrepreneurs can draw on.

The case findings also show that the use of visual greatly improve the strategic communication between various actors across and beyond the organizational borders. The visual presentation of 'the organisation on one page' provided a means to explicitly express a collective identity which was previously absent. By acquiring internal support gradually and along with external reputation and legitimacy, the ambiguity of the visual presentation and the openness for interpretation was highlighted in the research process. Just because of these characteristics, visual framing proved to be valuable to the institutional entrepreneur and they have different qualities from verbal and textual narratives.

8.3 Summary

Due to the power of the accounting inscriptions, the accounting system, which was designed as a tool to facilitate professionals' work, ended up being the all-important image that members of the organisation had to maintain. Rather than facilitating better coordination, accounting facilitated the disturbance of professionals.

By harvesting the power of accounting inscriptions, the institutional entrepreneur could promote his the change agenda. More specifically, the role of visual rhetoric plays an important role in promoting institutional changes as a device to hide institutional complexity and part of the repertoire of institutional entrepreneurs in its flexibility and malleability to help connect various stakeholders and display homogeneity in the organisational image.

In the next chapter, a broader scale field survey was used to explore the emotional group dynamics that first emerged from the case observation in RBGE. Specifically, how emotional ties and dependencies are affected by the implementation of management accounting practices and this emotional aspect can potentially contribute to institutional change. The next chapter explores the coping mechanisms employed by the organisations and how this has affected their organisations and their professionals.

CHAPTER 9. PSYCHOANALYSIS AND
INSTITUTIONAL CHANGE

The previous chapters have examined the macro institutional context – the multiple fields that the case organisation is embedded in (Chapter 6); the accounting change process in the case organisation (Chapter 7); the role of institutional complexity in the change process (Chapter 8); and how institutional entrepreneur use accounting inscriptions as visual framing devices to promote change (Chapter 9). Following the previous chapters, this chapter explains a novel dimension of institutional processes, how emotional and unconscious processes in group-dynamics can cause and propel institutional changes.

9.1 Introduction

Recently, literature has suggested that emotions and feelings are in play in the institutional dynamics (Croft et al. 2014; Creed et al. 2014; Boedker & Chua 2013). The emotional processes play an important role in organisational life and the process of change and can very much influence the outcome of institutional changes (Voronov & Vince 2012). However, how individual processes are connected to group processes and organisational processes, and how these processes influence institutional changes are the theoretical questions to explore in this chapter.

To unpack the cognitive and emotional dimensions of institutional changes, this chapter takes the case observation in RBGE as a starting point and examines similar scientific and cultural organisations in the same regulatory environment to explore the role of emotion in institutional change especially

the role of specialist work group in affecting emotional processes and colonising the organisation. Emotional aspects used to be part of the territory of psychology studies, however lately organisation studies, especially institutional studies have attempted to incorporate emotions as factors influencing institutional changes(Creed et al. 2014), especially their influence on cognitive and emotional investment and disinvestment (Voronov & Vince 2012). And individuals' emotions can affect their commitment to institution arrangements and therefore, have implications in institutional processes (Creed et al. 2014).

The growth of managerial professionals can be seen as a profound institutional change (Hwang & Powell 2009) which takes place in the public sector. The evaluative and normative practices which are common to these professionals can reduce other professional work to a routinized and standardised product (Suddaby & Greenwood 2001). Professionals with management expertise are distinguishable from those with different skillsets in fields such as law, medicine, sciences, social work etc. (Hwang & Powell 2009). These new professionals link organisations with their institutional environments, facilitating information flow which could potentially colonise other domains of professional work as well as establishing new power relations and hierarchies (Hwang & Powell 2009).

Conceptualising these small to medium size organisations with strong professional identity as professional work groups start with the observation that the individuals in the scientific and cultural organisations have strong commitment to their professions and organisations. In such professional groups, group leaders usually have significant role in the group identity and have significant symbolic meaning to group members. This chapter follows the theoretical foundation in Voronov and Vince (2012) and proposes that there is an important neglected dimension – group emotional dynamics.

In this chapter, I look closer to the intersections of institutional logics in organisations and examine the mechanism used by these organisations to cope and respond to the demands from the institutional environment – setting up special work groups. These special work groups are set up to shield the rest of the organisations from performance management. This chapter also discusses how the use of special work groups can have an impact on emotions of individuals, which might lead to disinvestment in institutions.

Through surveying the field, most organisations have set up a work unit to deal specifically with the demands from the government of having such performance management practices in place. Interesting changes in dynamics are found in the data collected from interviews and observations.

Therefore, against the backdrop of new public management (NPM), this chapter aims to, primarily from a micro perspective: (1) provide some insight on the impact of NPM reforms on Scottish NDPBs; (2) explore and understand how special work groups have an impact on individuals' emotions; (3) explore how emotions influence institutional dynamics and changes.

9.2 Group Level Institutional Dynamics

The organisations under investigation are small size scientific and cultural organisations with highly respected professionals as leaders. For example, senior scientists have taken up the position of Head of Royal Botanic Garden Edinburgh, over the years, with special expertise in botanical science and garden management. The Head Librarian of National Library of Scotland has extensive experience in managing large collections. Similarly, the heads of National Galleries and Museums of Scotland are both equipped with

impressive professional background and are among the leading professionals in their own area of expertise.

Each division is centred on a leader who is, first and foremost, a successful professional to his fellow colleagues with respectable knowledge, experience and background. Be they scientists, horticulturists, accountants or commercial managers, the professional groups are tightly working towards a common goal, on a project or a mission. Therefore, the divisions are, first of all, a professional group and then part of the organisation. This pattern is also found in departments within divisions.

These leaders take central role of their respective professional group and are deeply embedded in their professional logics and institutions. The rest of the organisation members, especially within the same profession, respect and follow the leader in conducting their professional work and they look up to the leaders of the groups to protect and keep professional identity intact when the group faces external threats to the territory and reputation of the professions.

Emotions can be difficult to document. It was only possible through prolonged field immersion. Over the course of two years, I was able to recognise each individual's expressions and gestures during formal interviews. I was also gather information during informal interviews (random chat along the corridor) of individuals' descriptions of how they felt about the new practices and processes in place.

During one field visit, I walked past the office of a senior scientist who refused to be recorded during the interview. I reassured him that I could just talk to him and take notes. He expressed his frustration and disappointment in the management and the loss of trust in the science profession. He thought that the natural thing for scientists to do was to keep their heads down and satisfy the bureaucracy as much as they could. He stated that he expected the

head of Science Division, as their leader with the same professional background, to defend their professional autonomy and shield off the pressure for them. However, on contrary, the head of Horticulture chose to 'act as a buffer' for his staff, because he believed that 'this was his responsibility'.

As Abbott (1988) illustrated that professional values often permeate organisations. Therefore, professionals often exhibit greater loyalty and embed more deeply in their professions rather than the organisational structure they are in. In complex modern organisations with complex environments, organisations tend to house different professional groups to deal with different institutional demands. This creates a further demand for group-based structures (Hayne & Free 2014). And often, professional groups have the same professional value and group members can have significant emotional attachment to their groups and see their leaders as a parental figure (Bion 1961).

The significance of this finding is the new level of empirical analysis. Institutional research has looked at levels of analysis including society, the industry, the organisation and individuals (Swogger Jr 1993). Besharov & Smith (2014) point out that in institutional logics research, intra-organisational heterogeneity and how logics manifest in organisations is under-researched. This chapter argues that conceptualising organisations as collections of different professional groups can help unpack the dynamics.

This mixed response extended that of Broadbent and Laughlin's (1998) finding that the GPs and head teachers set up 'specialist groups' to cope with the changes. In the empirical context of the thesis, professionals' responses to public sector changes differ on an intra-organisational group level.

When organisations in this research face new regulatory requirements from the government, professionals groups tend to react in the best interest of

their professions. When they perceive the external pressure as a threat to their professional work, they will actively resist and develop tactics to deal with it, like illustrated by Broadbent and Laughlin (1998). However, the resistance in these organisations are different. It is less intentional and almost unconscious at times. One of the common features now across these organisations is the use of specialist work unit, often referred to as 'performance unit', which are in charge of dealing with various performance reporting and management issues. They bring in professionals with different educational and occupational background to conduct the work that is new to the organisations.

9.3 The Reliance on Special Work Groups

In response to the Scottish Government requirement of conducting strategic planning and performance management practices, the organisations surveyed, depending on the size of the organisation, all have appointed a team, large or small, to deal with this task specifically. With the intention of shielding the rest of the organisation, these special work groups were put into place to manage the new requirements of having performance management practices. Different from Broadbent and Laughlin (1998), these groups do not only absorb external demands, they also have the choices of buffering or internalising external pressure for the organisation, and actively engaging in redesigning internal processes. Some of the members of such special work groups genuinely believe there is a place for new management techniques in their organisation and they are actively engaging in institutional work of changes. While others still hold the belief that these new management requirements should be kept away from professionals to preserve professional work.

These special work groups varied in size, ranging from one person in National Library of Scotland (NLS), to a team of more than ten in Scottish Environmental Protective Agency (SEPA). These organisations prioritised the recruitment of personnel on the special work groups as they see this as an important obligation to fulfil in order to satisfy the regulatory bodies and the Scottish Government. Almost all of the organisations recruited new staff member for the special work groups even when they were under pressure for funding cuts. When they did not have the resources to recruit new staff they often opted to relocate an existing employee, often with expertise and experience dealing with regulatory requirements to take up the responsibility.

These special work groups were the further development of the specialised group discussed in Broadbent and Laughlin (1998). In their article, the authors put forward the proposition that the work of these specialised groups requires further investigation. They suggested these special work groups had potential to colonise the rest of the organisations and especially, how they promoted institutional change.

These individuals or small groups of individuals had the potential to initiate and promote institutional changes as they situated at the intersection of institutional changes and two colliding institutional logics (professional logic and business logic). Having access to both fields and being able to provide a unique service to both external and internal audiences enables them to gain a more central position in the organisation regarding their legitimacy and resources. This is achieved through their ability to speak 'two languages'.

9.4 Two Discourses - External Reporting and Internal Management

In the search for the answer as to how these special work groups managed to influence the organisations and promote changes, it was found that the ability of using appropriate 'language' to talk to different audiences was crucial. This ability allowed the special work groups to communicate both with the external stakeholders and their internal colleagues within the organisations. Because these special work groups could act as bridges between the funding bodies and their home organisations, they could prove themselves as vital organisational resource in gaining legitimacy and managing relationship with their funding bodies and the Scottish Government. As a result, the organisations had to rely on these units to collect information from their staff and put into a format that was acceptable to their regulatory agencies. Over time, these special work groups were given the monopoly of managerial practices and reporting and ended up being the obligatory passage points (Callon 1986) which made these units indispensable to the organisations.

One condition that made this possible was their unique location in the institutional fields. These special work groups were located in the intersection of multiple fields in-between the external regulatory bodies and the professionals within their respective organisations at the same time having access to the expertise of the business world. Therefore, they were embedded in different institutional logics. The external regulatory bodies exert requirements through governance logic requiring the adoption of business practices while the operation of internal professional work follows professional logic.

During my interviews with individuals in the specialist work group expressed their constant need to 'speak different languages'. When they were

producing documents they would intentionally choose to speak the language of the targeted audiences. Therefore, if they were producing 'corporate plan' which was a three to five year plan for the approval of the Scottish Government, they would speak in a 'high-level language'. In contrary, when they were producing documents for internal use or communicate with professionals in other divisions, they would choose to use 'low-level language'. They would also occasionally spoke in a business language to suitable audience. This suggests that the special work groups were equipped with the ability to interpret certain circumstances with two or three ways of thinking. This was a result of their unique location at the intersection of two or three institutional fields and therefore, the two or three institutional logics seem taken for granted to them. They insist that it is necessary to 'speak the right language at the right time'. In McPherson & Sauder (2013b), it was found that individuals would 'highjack' another institutional logic if it worked in their favour. But in their case, individuals do this in a few instances in the courtroom on a very short-term basis. In this thesis, this ability to use different languages to influence different audiences embedded in different institutional logics can be a long-term assets for individuals to promote their agenda.

Different discourses can be identified with different institutional logics. When the organisation was conducting performance reporting or annual reporting, the specialist work group would 'talk' in discourse deemed appropriate to the government and officials. When they were conducting management activities in the organisation, they will switch the discourse, which is more internal oriented. The two types of discourse therefore corresponded to the two different institutional logics – governance logic and professional logic. Governance logic emphasised on compliance to regulations while professional logic emphasised on professional excellence.

The professionals were aware of the need to pick up the appropriate discourse in a given situation.

> *It is real challenging getting the language written in a way that all of these different people can understand it…. We are using different documents for different audiences. So we are just reviewing our corporate plan, and we are trying to keep it quite high-level language, because it is really for the government. Then there's the annual plan which is the one that we focus our staff behind, but it is still quite external language, so it is just this year as we build that annual plan internally, we also putting into it a lot of internal language that we understand as people start using it for their own plans. So we have three levels of plans. (Interviewee from Scottish Environmental Protective Agency)*

9.5 Translation and Communication as Institutional Work

The concept of institutional work is described as 'the purposive action of individuals and organizations aimed at creating, maintaining and disrupting institutions' (Lawrence & Suddaby, 2006; p215). The important roles that the special work group fulfilled in their organisations require further investigation (Broadbent & Laughlin 1998).

One major finding of this chapter is that one key function of these special work groups was to translate between two sets of institutional logics and their two sets of languages and facilitate communications between different work groups. The translation had the potential to maintain and disrupt existing institutions within the organisation and could also lead to the creation of new institutions.

The effect of the institutional work conducted by the special work groups is to bridge multiple logics while contributing to the gradual change of

institutions by changing the group dynamics and especially in this case, the dependency basic assumption (baD).

Linking back to literature from early 1990s, professionals form absorption groups to resist public sector changes. This chapter offers a more nuanced view of the change processes. Organisations build specialist work groups to manage the changes and in turn, these groups act as translators rather than buffers. They are more active than passive. However, whether the specialist work groups can function is determined by the individuals who head up the specialist work groups as well as the organisational environment. Therefore, among the field survey of the scientific and cultural organisations, there are negative actors who work more like buffers and absorption groups. Especially linking to the findings in the previous chapters, organisations dominated by professional logics and operating in restricted cultural production tend to be more negative than the others.

It is also found that, when the more positively perceived specialist groups are functioning, the collaboration and communication added value. When specialist groups are perceived negative in the organisation, the diffusion of performance management practices is blocked or slowed down because the management and control is done under a dominant professional logic in everyday work environment.

9.6 Emotional Factors in Institutional Change

The specialist work groups had a significant impact on other organisational members' emotional processes. When they were frustrated and disappointed, they were likely to divest from their organisation as well as their professional work life and contributed to the institutional change unintentionally. Drawing on the framework developed by Voronov and

Vince (2012), emotions organisation members have towards changes can be regarded as institutional work, which contributes to the divestment to the professional logic of their professional groups. Cognitively the professionals recognise the value of conforming to the performance logic so that they (silently sometimes) reluctantly cooperate with the specialist work group to satisfy the requirement for legitimacy.

According to organisational psychoanalysis theory, organisations are processes of human behaviour that governed by unconscious processes (Bion 1961). The frustration accumulated regarding the requirements from the specialist work groups and their increasing emphasis on the managerialistic value in the broader public sector can unconsciously lead to the disinvestment in their home organisation. Also, if their leader did not act as a buffer or a protector for the professional that would break the dependency and attachment they had with their leaders which could lead to further divestment in the current institutional logic of the group. This could decrease their dedication towards group and organizational objectives.

9.7 Discussion and Implications

When studying the impact of management accounting techniques and practices in public sector organisations, attention is often paid to resistance and disruption, which are explained by the cognitive and conscious processes of the actors under frameworks such as contingency theory, neo-institutional theory and other organizational theories. However, this chapter argues that in the environment of strong professional bonds (such as that of scientific research groups, horticultural groups, artists, librarians, etc.), group level analysis could potentially yield more insights than that organizational level or individual level.

These groups and their organisations have significant impact on the happiness of professionals' work life. Emotional processes could lead to the gradual and subtle divestment in current institutional arrangements and therefore, contribute to change. Ignoring the psychoanalysis and unconscious emotional processes and group dynamics in the workplace could lead to important oversight on the impact and dysfunctional consequences in work places performance. To enrich the study of management accounting changes in the public sector, psychoanalysis and its body of theories could provide deeper and more nuanced insights into the phenomenon such as resistance, disruption and anti-productive behaviour. Bring the psychoanalysis insights into institutional theory, such as the inclusion of emotional processes, could provide the much needed micro perspective and complement the existing literature on the micro foundations of institutional theory (Thornton et al. 2012).

Among various strands of psychoanalysis theories, Bion (1961) pioneered the theory on group dynamics. Conceptualising these relatively small sized scientific and cultural organisations as multiple work groups embedded in their own dominant professional logics as well as peripheral performance logic offer a new level of analysis. A senior professional who is highly respected by other professional group members often leads such groups. Therefore, the whole group is embedded in one dominant professional logic, and functions as work group.

When intrusion and exogenous shock such as NPM are experienced, the work groups look up to the leaders for protection. The penetration and introduction of performance management by the leader can be interpreted as breach to the implicit agreement between the leader and the group. Therefore, the work group can potentially experience dysfunctional consequences as it falls to become a basic assumption group (baD). Through the use of specialist work group, the intrusion can be reasonably managed.

However, the specialist work group has the potential to colonise the work groups with their special position in-between the internal organisation members and the external stakeholders such as regulatory agencies. Having expertise in both fields, such specialist work group have the potential to colonise the work groups and initiate institutional changes.

When colonising behaviour is experienced, group members will exhibit more symptoms of basic assumption group, such as more conflict and frustration. The conflict and frustration can lead to group members' divestment in the current institutional arrangement. Therefore, institutional change is expected.

Therefore, adding to previous research, which conceptualised institutional work as conscious action of actors that change institutions, this chapter explores the emotional processes, which lead to the maintenance and disruption of institutions. The empirical investigation shows the strong role of leaders in these professional groups, especially during external changes being enforced. Protective leaders often take up the responsibility of dealing with the external pressure leaving the members' professional life protected and largely unchanged. In this case, basic assumption of dependency (baD) is not violated. No emotional disruption is experienced and therefore, institutions are maintained. When leaders buy in the managerial changes and allow the changes of routine and ideology penetrate the work group, group members express disappointment in their leader and therefore lower their emotional as well as cognitive investment in the institution and therefore could lead to institutional disruption.

CHAPTER 10. CONCLUSIONS

This chapter concludes the thesis by providing an overview of the study, theoretical and practical contributions of this thesis as well as a discussion on limitations and suggestions for future research.

10.1 Overview of the Study

This thesis is the fruit of a two-stage investigation in a special and often neglected public sector context – scientific and cultural organisations. They are characterised by institutional complexity. Through institutional theory lens and an inductive approach of enquiry, several research themes emerged during the first stage of the fieldwork. Later investigation followed up on these themes and subsequently the research findings are organised into five interrelated empirical chapters (chapter five to nine). Chapter one sets out the background and research questions of the study. Chapter two provides a literature review of NPM and interpretive management accounting research and chapter three discusses the development and current status of institutional theory. Chapter four outlines the research methodology. Chapter five to nine present the empirical findings under different themes and the current chapter concludes the thesis by offering a summary of findings, contributions as well as limitations and future directions for research.

Chapter five begins the empirical enquiry with the questions 'what are the macro-level dominating institutional logics in the field of scientific and cultural organisations' and 'what is the relationship between the institutional logics and managerial techniques in this field'. Informed by the concept of

field and Bourdieu's study on different types of cultural production, this chapter focuses on the nature of the scientific and cultural organisations such as the Royal Botanic Garden Edinburgh (RBGE), the National Library of Scotland (NLS) and the National Galleries of Scotland (NGS).

Using documents and interview data, it is found that all these organisations share a common dilemma regarding the adoption and implementation of performance measurement and other management accounting techniques: some activities are more difficult to measure and as a result, the professionals are reluctant to engage in performance management to maintain professional autonomy and protect their territory. However, the broader macro regulatory environment is moving towards a more 'measured' public sector due to the influence of initiatives and trends such as the New Public Management (NPM). Therefore, the response from these organisations is to measure what is easily measured and leave other immeasurable activities out. Thus, this could lead to dysfunctional behaviour and disruptive consequences. For example, the less measured area of the organisation will be less reflected in formal reporting and as a result, might be politically neglected. Another consequence will be internal conflicts due to the fact that 'some people can get away with not doing the measuring and reporting' which creates tension between different departments, divisions and different functions.

These scientific and cultural organisations are less exposed than some other public sector organisations such as hospitals and schools; however, increasing pressure to 'soak up' managerialistic values and techniques is closing up on these organisations. The special quality that these scientific and cultural organisations share is that they have multiple objectives and audiences to serve with a number of distinctive professional groups working together. With multiple objectives to fulfil, and multiple audiences to serve, these organisations find it easier to measure some aspects of their work than

others. This creates a puzzle as to what aspects are more difficult to measure and why and what consequences could this imbalance potentially lead to.

To answer this question, Bourdieu's study on cultural production field provides a useful distinction between restricted cultural production and large-scale cultural production. Bourdieu distinguished between organisations, which engaged in either field and as a result have different level of autonomy and space to define their own performance criteria. However, in this special public sector that this thesis examines, the professions are dominated by the logic of their profession while at the same time function as public service units. This resulted in them being embedded in different fields at the same time. (For example, visitor attraction and commercial activities can be regarded as large-scale production while the highly specialised professional work can be regarded as restricted cultural production.) With the insight of Bourdieu's work (DiMaggio 1979; Emirbayer & Johnson 2008; Friedland 2009), the response to the question that initiated the empirical investigation is negative.

From this perspective, it is understandable that these organisations encounter difficulties when attempting to measure all their activities under a unified strategic framework. Thus, conclusion is drawn that, some parts of scientific and cultural organisations cannot be made to measure to the satisfaction of both professionals and external stakeholders because some activities are not appropriate to external evaluation. Professional code of conduct and trust play the role of quality control in these instances. As to the reluctance of the professionals, it can be understood as an act to protect the autonomy and power of the field they are embedded in. Professionals are naturally reluctant to such measurement activities as they see this as an act of undermining their work.

Chapter six to nine follow up on the investigation of such organisations as multiple professional groups working in different fields and adopt one branch of the latest development in institutional theory literature (institutional logics perspective) as the main theoretical lens to tease out the micro dynamics in the process of developing and implementing a new performance management system in the Royal Botanic Garden Edinburgh. Multiple data sources were used which include participatory observation, documents, interviews etc.

Institutional logics perspective is chosen as a theoretical lens to make sense of the different behaviour and value systems of different professions. Taking a procedural perspective, this chapter conceptualises the case organisation as an organisation of institutional complexity where different divisions act as distinctive work groups with different institutional logics. Different institutional logics prescribe different ways of thinking and acting. As a result, the implementation of performance management and management accounting changes are interpreted differently across divisions. They interpret the changes through their extant logics and reacted differently accordingly. This caused unintended disturbance and instability. The professionals dominated by different logics have worked together as one organisation for a long while; however, the new system and new practices implemented caused friction between divisions.

Overtime, the system was recognised by the external stakeholders and was regarded as a valuable innovation. The 'success' of the innovation led to the rise of managerial logic and the system, which was designed as a tool facilitating the coordination and efficient operation, became an end in itself to be maintained. During the change process, the use of graph and charts in facilitating visual representation of the organisation was useful and important in securing buy-in from various parties of the organisation. Specifically, the visuals hide the institutional complexity and possible

conflict and portray the organisation as a homogeneous entity rather than 'many things to many people'. Chapter eight argues that the skill of using visuals to frame changes is an important part of the repertoire of institutional entrepreneurship when initiating and promoting changes. Accounting, as part of the institutional entrepreneurship, promotes changes by constantly being present, compared to other sources of changes which can be absent to organisation members.

During the field work in the RBGE, the way the organisation managed and coped with the external pressure led to emotional responses from professionals such as scientists, horticulturists. This observation led to the next stage of the empirical enquiry of the role of emotions processes in the institutional change processes. Rather than assuming that all parties are informed and making rational decisions, when facing a technical innovation such as new accounting system, only some people are more technically capable to challenge the rationale of the changes. Majority of the organisational members are responding in an emotional way to a presumed rational adoption by the senior management.

Chapter nine employs the method of a field survey in several scientific and cultural organisations dominated by prevailing professional logic and explores how these organisations cope with the pressure of adopting new managerial techniques. This chapter focuses on what impact these changes have had on the life of professionals especially their attachment to their work groups and their attachment to professional logic. It is found that through the setting up of special work group, these organisations delegated the task of performance management to several individuals (from one to five) as a way to shelter the rest of the organisation from the institutional pressure in adopting managerial techniques (so that life can go on as normal). Conceptually, to these organisations, the task of performance management was first and foremost, deemed separable from the core work activities and

therefore, using the specialist work groups could buffer the rest of the organisations from the performance management activities. However, the specialist work groups had the potential to colonise the rest of the organisation rather than just acting as buffer. Their special skill such as translation between different types of discourses (the political, the business-like and the professional) enabled them to become indispensable to the organisation. With the special position that these special work group and their special resources and skills, they could gain legitimacy and resources to facilitate their colonisation. Their unique position between two fields (that of the organisations and that of the government), their expertise in two distinct discourses of the two institutional logics (one used inside the organisation to facilitate a professional logic and one used externally to facilitate performance logic) gives them great potential to initiate real institutional change beyond that of facilitating de-coupling.

10.2 Theoretical Contributions

This thesis has contributed to several domains of research theoretically, which include institutional theory, organisation studies, public management and management accounting research. In this section, I will discuss these theoretical contributions in detail.

10.2.1 Cross-level institutional change

Institutional theory - the main theoretical lens of the thesis – has been one of the major branches of theoretical development in organisation studies. Recently, three new developments (institutional logics perspective, institutional entrepreneurship and institutional work) are taking institutional theory forward and over the embedded agency dilemma. The main

theoretical framework adopted in this thesis is that of the institutional logics perspective.

Institutional logics perspective provides a theoretical framing on a macro societal level. It is conceptualised that there are seven basic institutional orders that inform behaviour (Thornton et al. 2012). Though, it is claimed to be a cross –level theoretical framework to analyse institutional and organisational changes, there have been few empirical studies addressing cross-level institutional changes (except Smets et al., 2012).

This thesis starts from a macro-level societal ideological shift in one sector, which leads to the changes in micro-level practices. Accounting, acting as a tool for change, connects the macro to the micro. Rather than merely adding another layer of accounting practice on top of exiting professional practices, existing practices change as a result of the accounting practices.

Institutional logic combines the symbolic and material manifestations of institutions and places the emphasis on heterogeneity rather than homogeneity, which was emphasised by earlier institutional developments. In chapter three, major institutional logics at play in the field of scientific and cultural organisations are identified. In chapter four, using a longitudinal in-depth case study, different institutional logics prescribe different behaviour to different professionals. The interplay between different institutional logics is highlighted by the use of accounting as a media. Different logics prescribe different responses to the same accounting change and as a result, accounting also shapes the extant logics in place. Accounting therefore, is powerful in the way it shapes and changes existing institutional arrangements.

10.2.2 New Level of institutional investigation

Institutional analysis has long been focusing on different levels of society. Normally, societal level, organisational level and individual level are the most often attended to levels of investigation. This thesis proposes a new level of analysis, which could potentially link the institutional theory literature better to accountability and professionalism literature – group level analysis. Certain organisations, like the ones investigated in this thesis, are made up of distinctive yet collaborating groups of professionals who are embedded in different institutional orders and are governed differently under different performance criteria either internal or external to the professions.

In particular, this level of analysis enables the exploration of other forces within the institutional framework. For example, rather than assuming an organisation is the unit of analysis, a group level analysis offers more nuanced account of how, for example, visual devices such as balanced scorecard, influence the change process and how they influence institutional complexity. They portray certain images of the organisation that are not perfect but are perceived as 'true representation' and a fact by different groups of users which in turn influence institutional change by making accounting more easily 'taken for granted'.

This level of analysis also adds dimension of emotion processes to the institutional analysis. By exploring the different level of emotional attachment different professional groups have to certain groups and the institutional orders they subscribe, further micro dynamics can be brought into institutional analysis, which was not possible before. Chapter five illustrate the emotional dimension on a group level is also a crucial factor in the process of institutional change.

By conceptualising institutional changes at a group level, researchers can tease out the dynamics in-between the organisational level and the individual level and search for group patterns, which could be significant to developing accounting and institutional theories.

10.2.3 Enriching Existing Institutional Concepts

Although more recent concepts of institutional theory have been adopted to inform this empirical analysis, earlier concepts remain highly relevant and are still attracting much research effort.

Legitimacy is important resource to the survival of an organisation (Meyer & Rowan 1977) and this is one of the most important reasons for the adoption of new accounting systems/techniques identified by prior research. It is confirmed in the case study of RBGE that legitimacy remains one of the most important motivation and concerns for organisations, especially the senior management. However, symbolic adoption could help gain legitimacy just like actual adoption. Therefore, it is helpful to consider legitimacy together with other concepts such as decoupling. Many research papers have addressed the concept of decoupling both in organisation studies as well as accounting. However, most research identify the factors that trigger decoupling rather than examining the process of how decoupling/coupling unfolds over time. Chapter four of the thesis examine the change process and find that decoupling could be triggered and erased over time depending on the factors such as leadership, commitment and change in ideology. This finding also reveals that institutional pressure has an impact far greater than mere triggering organisational response and change; it can also lead to fundamental changes in ideology or dominant institutional logic. Also, by examining different divisions with different dominant institutional logic, it is suggested that it is more helpful to conceptualise institutional pressure 'running through' the organisation rather than simply 'squeezing' from the

outside. For example, different professionals experience institutional pressure from their funding bodies as well as their own professional community therefore, the traditional way of looking at institutional environment as merely external can no longer realistically present the reach and depth of institutional impacts.

Institutional theory has been informing management accounting research since the 1980s, neo-institutional sociology (those inspired by Meyer & Rowan 1997 and DiMaggio & Powell 1983) and old institutional economics (those inspired by Burns & Scapens 2000) being two most prominent strands. Rather than assuming that accounting facilitates rational decision making by providing superior information, institutional theories challenge this orthodox by putting accounting in its organisational and social context. However, no theory is perfect and institutional theory has its difficulties. Among them, the paradox of embedded agency is the most important.

This thesis adopts the recent developments in neo-institutional sociology, namely institutional logics perspective, institutional work and entrepreneurship that aim to deal with the paradox head on. Rather than inheriting the iron cage of neo-institutional sociology perspective, these new developments start from how institutions condition the individuals' cognitive and therefore impact their actions. This way, individuals are not denied of their agency. In special circumstances when an individual is located in a location in institutional field and equipped with certain expertise, he/she could become an institutional entrepreneur who initiate and see institutional changes through. From a more micro perspective, actions that disrupt, maintain or create institutions can be analysed under the institutional work perspective when institutional changes are collective effort instead of that of a few individuals.

10.2.4 Enriching Institutional Theory Macro Level Complexity

Institutional theory provides a hierarchical understanding of the social world: macro institutions shape micro actions and at the same time micro actions reinforces and changes macro institutions (Thornton et al. 2012). However, little is known about how different institutions can be compatible in shaping organisational and individual behaviour. Recently, organisation studies scholars have proposed various frameworks to further conceptualise institutional complexity. Besharov & Smith (2014) propose a two by two matrix with centrality and compatibility as dimensions to examine different types of institutional multiplicity. They treat institutional logics as something rigid and stable as if they are entities with clear boundaries. This thesis shows that institutional logics are much more fluid in reality. Take RBGE as an example, it is impossible to assert what professional logic, governance logic and managerial logic are for the organisation and how compatible they are. Rather, the logics themselves evolve over time. Some scientists took on practices prescribed by managerial logic despite being embedded in professional logic (logic of science). And in the current climate of NPM, the discourse of governance logic is growing more similar to that of the managerial logic.

To further the theorisation on institutional multiplicity, this thesis proposes revisiting Bourdieu's concept of field. Bourdieu's conception of field has always been fluid and it is impossible to draw boundaries on field or institutions which dominate fields (Friedland 2009). By taking on a fluid view of institutional fields, it is possible to see how institutional logics in certain fields evolve and change over time.

Previous institutional research treated institutional environments like Russian dolls - the macro contains the meso and the meso contains the micro (e.g. Dillard et al. 2004; Hopper & Major 2007). This conceptualisation has

proven to be useful when the institutional environment is simple and organisations are dominated by one prevailing institutional logic. However, this conceptualisation is insufficient when applied in empirical contexts characterised by multiple prevailing institutions, such as this thesis. These institutions overlap, co-exist, compete and evolve together over time. For Bourdieu, every field is in a constant flux (DiMaggio 1979). By revisiting Bourdieu's conceptualisation, we can bring the dynamism back into institutional thinking.

10.2.5 Micro Foundation of Institutional Theory

Adding to the existing work on institutional change, emotional factors are important yet under-developed in institutional theory (Voronov & Vince 2012; Croft et al. 2014). Chapter nine provides a possible angle to investigate emotional processes as potential institutional work. When individuals experience frustration and disappointment in organisational, basic assumptions of work groups are violated which can lead to the disruption of institutional arrangements. Professional group members are found to disinvest in professional logic when feeling frustrated and let down by their group leaders. When this happens, according to Bion (1961) a functional work group becomes a basic assumption group, thus leading to dysfunctional consequences and one of these consequences is institutional disinvestment and institutional change. Borrowing from psychoanalysis, especially Bion's work, group level emotional processes can be explicated and the emotional aspect can add to institutional theorising.

By examining group emotional processes, in particular, how individual emotional processes play out in group dynamics, individuals are recognised to be influence by the groups they are in and in turn shape the group dynamics. Accounting practices as organisational and institutional practice

(Chapman et al. 2009b) can influence such group dynamics which have profound impact on individuals' work life.

This thesis further speculates that emotional processes can have a greater role to play in traditional professionals' work life, especially when individuals are heavily invested in their professional training and professional identity. However, this thesis could not explore this further due to the limitation of time and resources. The data set did not provide sufficient evidence to substantiate this speculation.

10.2.6 Visual Framing and Institutional Change

Chapter eight touches upon the visual power of accounting inscriptions and how this can play to the advantage of institutional entrepreneur. As part of the institutional entrepreneur's repertoire, the ability to frame changes using visual devices and accounting inscriptions can help to initiate and promote changes. Therefore, it is argued that acknowledging the visual elements in institutional changes and recognising their role and power in the change processes can help developing the mechanisms of institutional changes (Quattrone 2009; Latour 1986; Meyer et al. 2013). Accounting practices rely heavily on visual representations and various carefully designed devices. These visual devices play an important role in promoting institutional change as shown in the case study of RBGE. The BSC was welcome and ultimately institutionalised, to a large extent, because of its visual representation of the organisation.

Due to the limited scope and resources of this thesis, visual factors cannot be further and better theorised with the data collected. However, their importance was evidenced in the research process.

10.2.4 Accounting Reforms and Changes

Public management literature has long documented the resistance and difficulties during public sector reforms through accounting changes. This thesis offers a new perspective to look at the reform efforts. By conceptualising public sector professionals as different groups dominated by different institutional logics, it changes a two-sided (government and organisations) issue into a multi-sided issue (groups with different institutional logics). Rather than examining 'resistance', it is more helpful to examine the different causes of different types of resistance. For instance, for professional working in the scientific and cultural organisations such as scientists and artists, the cause for reluctance in adopting managerial changes is mainly the conflicting ideology. They do not believe the best way to deliver a service to a public is through the increasing use of managerialistic measures and techniques.

Different from organisations which operate in largely one field, such as the private sector which prioritise commercial/business logic, also different from public sector organisations which operate to serve one major objective, such as health service and education, the scientific and cultural organisations investigated in this thesis often serve multiple objectives which cannot be easily prioritised. Chapter five has shown that pushing these organisations to measure their activities could lead to dysfunctional behaviour and unintended consequences. Chapter six to eight provides a longitudinal view of why and how these changes unfold in one such organisation and how this process is shaped by multiple rather than single logic. Chapter nine provides new perspective on the intra-organisational group level dynamics and the role of subconscious and emotional factors in public management and accounting changes. These angles provide new directions for future research and enrich the existing literature on public sector reform especially those involving accounting changes and multiple institutional logics.

10.3 Practical Contributions

10.3.1 For Managers

For managers who aim to sidestep institutional pressure by decoupling, my research offers a cautionary reminder that besides intentional institutional work, emotions could also lead to institutional change, if not more effectively. Chapter nine offers insights into organisations using specialist work group to 'decouple' the rest of the organisation from engaging in actual changes. However, change still happens.

For managers who want to ensure actual compliance, it is worth noticing the power of visual representations and the use of visual framing techniques in initiating and promoting changes. By creating a constant presence of change (like the case in RBGE), the chance of initiating a conversation with organisational members increase significantly, this could lead the organisation onto the path of change.

10.3.2 For Policy Makers

For policy makers who seek to influence behaviour of organisations, it is worth investigating where, when and why variations of practice might occur. Rather than assuming all professionals react and behave the same, it is more helpful to conceptualise them being dominated by different institutional logics specific to their contexts. Accountability has different meaning to different groups of professionals dominated by different institutional logics. By influencing the composition or how institutional logics are mixed in each specific context, it is more likely that future policy could shape the behaviour of professionals and organisations in a more direct and effective manner. This approach could also improve the adoption and implementation of

innovations more effectively by teasing out the micro dynamics on group level and individual level.

Another important lesson from the attempt of studying a number of organisations grouped together by the government under one label (Executive NDPBs) is the significant diversity and the impossibility to govern all these organisations with one system of performance measurement. In Chapter five, the survey of the field of NDPBs revealed that regarding the performance criteria, there are two orientations: internal and external. Corresponding with Bourdieu's concept of restricted cultural production, large-scale cultural productive activities (such as visitor numbers, number of books checked out, number of complaints etc.) are easily measurable in quantifiable performance measures. However, different professional fields have different degree of autonomy regarding the capability of defining their own performance criteria. Organisations (such as the libraries, galleries, botanic gardens and museums) are led by highly trained and experienced professionals and their performance criteria are more intrinsic to the profession and the standards that the professionals accord to themselves. It is important to recognise the differences between the natures of different fields.

Therefore, to get more comprehensive view, it is helpful to perceive the public sector organisations as individuals rather than imposing private sector management techniques to make public sector organisation behave more like private sector. Recognising the various logics and ways of thinking and doing can therefore enable the policy maker to make better sense of the real causes of resistance and the emotional and moral side-effects these initiatives and reforms could lead to. For example, this thesis has provided a comprehensive view of the cultural and scientific organisations in the public sector scene and highlighted the role of professional logic and its interaction with performance logic and management accounting techniques. To protect

professional autonomy and territory, professionals' behaviour departs from the rational individual assumptions most management theories implicitly impose.

10.4 Limitations of the Study

This study focuses on scientific and cultural organisations in the Scottish public sector and uses a single intensive case study and a subsequent field survey. Due to limited time and other resources, this research design inevitability leads to limitations.

Firstly, the findings of the study might be skewed to those more proactive organisations sampled in this study. As the starting point of the snowballing data collection is a workshop held back in November 2013 with voluntary participation. Organisations included in the field might be more positive and active in conducting new performance management practices than other organisations in the public sector. However, a general impression is that these organisations are not abnormal among their peers. And their experience of the performance management changes are representative of the situations in scientific and cultural organisations if not more broadly.

Secondly, the study of institutions and institutional logics can be a much broader scope than the current study. However, institutional changes are subtle and sometimes much less visible. The time scale of the observation and subsequent data collect only spans five years which might be too short for fundamental institutional changes to manifest. However, the reliance on observation data rather than interview data in the intensive case study in RBGE allowed the researcher to be immersed in the field of research on a long-time basis. Observations on actors' behaviour and the organisations'

attitudes changes are direct evidence in support of the institutional changes claim.

Thirdly, the data collected and used for analysis might be skewed and biased more toward senior level of the organisations investigated. Because access to detailed and lower level everyday activities requires a much higher level of access and much longer period of exposure in the case organisations. Due to the limitation on time and budget, only one intensive case study was achieved in the Royal Botanic Garden Edinburgh (RBGE). Other organisations were surveyed and interviewed without prolonged period of observation or immersion in the field.

Fourthly, although generalisability is not traditionally a major concern for qualitative studies, by offering a micro level longitudinal case study as well as a field level survey, this study employs a cross-level perspective and certain findings could potentially be extended to other scientific and cultural organisations or more complex hybrid organisations (in institutional logics sense). Caution should be exercised when generalising the findings to other types of complex hybrid organisations such as those in the private sector where members of staff generally have consensus as to the priority of market/commercial logic.

10.5 Suggestions for Future Research

Future research can continue this line of enquiry informed by institutional logics perspective and other recent development in the institutional theory (such as institutional work) to investigate changes in other types of organisations to extend the conclusions made in this thesis about scientific and cultural organisations. Particularly, management accounting research is rooted in the practice, which provides an excellent micro angle to the

institutional analysis which is often macro oriented. It has been shown that cross-level studies can enrich both management accounting and organisation studies theories as well as practice.

Secondly, from the perspective of public sector reforms, it is vital to revisit what accountability means to different actors embedded in different institutional logics. What counts as accountable behaviour, therefore, changes across institutions as well as groups of professions? And how does different modes of accountability co-exist and how can this change over time be fruitfully studied?

Professionalism is another potential direction for future investigation. The studies of professions in accounting research often centre on the accounting profession and very little has been done on the effects of accounting practices have on other professions (except the literature on hybrid medical professionals). This research has shown that accounting has a much further reach than previously illustrated in accounting literature. Some professions such as that of curators, scientists, librarians, artists are being influenced and their working behaviour changed by accounting practices in the trend of public sector reforms. It is worth further research effort to investigate the impact and consequences of such influences of accounting.

Another further research avenue is on the special organisational forms such as those investigated in this thesis. Social enterprises are popular in organisations studies recently and their special organisational and governance form is of particular interest. The scientific and cultural organisations investigated here is equally interesting, if not more in those aspects. Further studies could look into the governance structure of such organisations and how best to resolve the conflicts that originate from their multiplicity in institutional orders, strategic objectives, professions, practices,

identities and how this multiplicity can be made possible and maintained as a unity of that of an organisation.

10.6 Concluding Remarks

This final chapter has provided an overview of the study and discussed the theoretical and practical contributions on offer. This thesis investigates how institutional change unfolds from different angles (both macro and micro). During such institutional change, accounting plays an important role of a practice, of a media, of an ideology, of a way to perceive change, a tool and when out of hand, a master.

There is a danger for accounting to become an end in itself or something else it has never intended to be. Just like the Spanish proverb at the beginning of chapter six states: 'more grows in the garden, and then the gardener knows he was planted.'

It is my hope that accounting does not become the 'more' and we, the gardener.

References

Abbott, A., 2005. Sociology of Work and Occupations. In N. Smelser & R. Swedberg, eds. *The Handbook of Economic Sociology*. Princeton University Press, pp. 307–330.

Abbott, A.D., 1988. *The System of Professions: An Essay on the Division of Expert Labor*, University of Chicago Press.

Ahrens, T. et al., 2008. The future of interpretive accounting research—A polyphonic debate. *Critical Perspectives on Accounting*, 19(6), pp.840–866.

Ahrens, T. & Chapman, C.S., 2007. Management accounting as practice. *Accounting, Organizations and Society*, 32(1–2), pp.1–27.

Alford, R.R. & Friedland, R., 1985. *Powers of Theory: Capitalism, the State, and Democracy*, Cambridge University Press.

Alvesson, M. & Deetz, S.A., 2006. 1.7 Critical Theory and Postmodernism Approaches to Organizational Studies. *The SAGE Handbook of Organization Studies*, p.255.

Argyris, C., 1952. *The Impact of Budgets on People*, New York: Controllership Foundation.

Arnaboldi, M., Lapsley, I. & Steccolini, I., 2015. Performance Management in the Public Sector: The Ultimate Challenge. *Financial Accountability & Management*, 31(1), pp.1–22.

Arnold, P.J. & Oakes, L.S., 1995. Hospital in the United States: A Study of the Entity Assumption in Accounting. *Critical Perspectives on Accounting*, 6(2), pp.105–123.

Astley, W.G. & Ven, A.H. Van de, 1983. Central Perspectives and Debates in Organization Theory. *Administrative Science Quarterly*, 28(2), pp.245–273.

Ballantine, J., Brignall, S. & Modell, S., 1998. Performance measurement and management in public health services: a comparison of U.K. and Swedish practice. *Management Accounting Research*, 9(1), pp.71–94.

Barley, S.R. & Tolbert, P.S., 1997. Institutionalization and Structuration: Studying the Links between Action and Institution. *Organization Studies*, 18(1), pp.93–117.

Barretta, A. & Busco, C., 2011. Technologies of government in public sector's networks: In search of cooperation through management control innovations. *Management Accounting Research*, 22(4), pp.211–219.

Battilana, J., 2006. Agency and Institutions: The Enabling Role of Individuals' Social Position. *Organization*, 13(5), pp.653–676.

Battilana, J. & D'aunno, T., 2009. Institutional work and the paradox of embedded agency. In *Institutional work: Actors and agency in …*. pp. 31–58.

Battilana, J. & Dorado, S., 2010. Building Sustainable Hybrid Organizations: The Case of Commercial Microfinance Organizations. *Academy of Management Journal*, 53(6), pp.1419–1440.

Battilana, J. & Dorado, S., 2010. Building Sustainable Hybrid Organizations: The Case of Commercial Microfinance Organizations. *Academy of Management Journal*, 53(6), pp.1419–1440.

Battilana, J., Leca, B. & Boxenbaum, E., 2009. 2 How Actors Change Institutions: Towards a Theory of Institutional Entrepreneurship. *The Academy of Management Annals*, 3(1), pp.65–107.

Battilana, J. & Lee, M., 2014. Advancing Research on Hybrid Organizing– Insights from the Study of Social Enterprises. *The Academy of Management Annals*, 8(1), pp.397–441.

Baxter, J., Boedker, C. & Chua, W.F., 2008. The future(s) of interpretive accounting research—A polyphonic response from beyond the metropolis. *Critical Perspectives on Accounting*, 19(6), pp.880–886.

Baxter, J. & Chua, W.F., 2003. Alternative management accounting research—whence and whither. *Accounting, Organizations and Society*, 28(2–3), pp.97–126.

Berger, P.L. & Luckmann, T., 1967. The social construction of reality: a treatise in the sociology of knowledge.

Besharov, M. & Smith, W., 2014. Multiple Logics in Organisations: Explaining Their Varied Nature and Implications. *Academy of Management Review*, 39(3), pp.364–381. 18p. 1 Diagram.

Binder, A., 2007. For love and money: Organizations' creative responses to multiple environmental logics. *Theory and Society*, 36(6), pp.547–571.

Bion, W.R., 1961. Experiences in Groups And Other Papers. In *Experiences in Groups And Other Papers*. London: Tavistock, pp. 1–191.

Blank, G., 2007. *Critics, Ratings, and Society: The Sociology of Reviews*, Rowman & Littlefield Publishers.

Board, R. De, 1978. *The Psychoanalysis of Organizations: A Psychoanalytic Approach to Behaviour in Groups and Organizations*, Routledge.

Boedker, C. & Chua, W.F., 2013. Accounting as an affective technology: A study of circulation, agency and entrancement. *Accounting, Organizations and Society*, 38(4), pp.245–267.

Bogt, H. Ter & Budding, T., 2010. Current NPM research: digging deeper and looking further. *Financial Accountability …*, 26(August), pp.241–245.

Boston, J. et al., 1996. *Public management: the New Zealand model*, Oxford University Press.

Bouckaert, G. & Halligan, J., 2008. *Managing Performance: International Comparisons*, Routledge.

Bourdieu, P., 1984. *Distinction: A social critique of the judgement of taste*, Harvard University Press.

Bourdieu, P., 1977. *Outline of a Theory of Practice* J. Goody, ed., Cambridge University Press.

Bourdieu, P., 1993. *The field of cultural production: Essays on art and literature*, Columbia University Press.

Boxenbaum, E. & Battilana, J., 2005. Importation as innovation: transposing managerial practices across fields. *Strategic Organization*, 3(4), pp.355–383.

Boxenbaum, E. & Jonsson, S., 2008. Isomorphism, diffusion and decoupling. *The Sage handbook of organizational institutionalism*, pp.78–98.

Bozanic, Z., Dirsmith, M.W. & Huddart, S., 2012. The social constitution of regulation: The endogenization of insider trading laws. *Accounting, Organizations and Society*, 37(7), pp.461–481.

Brignall, S. & Modell, S., 2000. An institutional perspective on performance measurement and management in the "new public sector." *Management Accounting Research*, 11(3), pp.281–306.

Broadbent, J., Dietrich, M. & Laughlin, R., 2002. The Development of Principal-Agent, Contracting and Accountability Relationships in the Public Sector. *Public Management: Critical …*, pp.259–284.

Broadbent, J. & Guthrie, J., 1992. Changes in the Public Sector: A Review of Recent "Alternative" Accounting Research. *Accounting, Auditing & Accountability*, 5(2).

Broadbent, J. & Guthrie, J., 2008. Public sector to public services: 20 years of "contextual" accounting research. *Accounting, Auditing & Accountability Journal*, 21(2), pp.129–169.

Broadbent, J., Jacobs, K. & Laughlin, R., 2001. Organisational resistance strategies to unwanted accounting and finance changes: The case of general medical practice in the UK. *Accounting, Auditing & Accountability Journal*, 14(5), pp.565–586.

Broadbent, J. & Laughlin, R., 1998. Resisting the "new public management": Absorption and absorbing groups in schools and GP practices in the UK. *Accounting, Auditing & Accountability Journal*, 11(4), pp.403–435.

Bromley, P. & Powell, W.W., 2012. From Smoke and Mirrors to Walking the Talk: Decoupling in the Contemporary World. *The Academy of Management Annals*, 6(1), pp.483–530.

Brunsson, N. & Olsen, J.P., 1993. *The reforming organization*, Routledge.

Bryman, A., 2012. *Social Research Methods*, OUP Oxford.

Bryman, A. & Bell, E., 2011. *Business Research Methods 3e*, OUP Oxford.

Burchell, S. et al., 1980. The roles of accounting in organizations and society. *Accounting, Organizations and Society*, 5(1), pp.5–27.

Burchell, S., Clubb, C. & Hopwood, A.G., 1985. Accounting in its social context: Towards a history of value added in the United Kingdom. *Accounting, Organizations and Society*, 10(4), pp.381–413.

Burns, J. & Scapens, R.W., 2000. Conceptualizing management accounting change: an institutional framework. *Management Accounting Research*, 11(1), pp.3–25.

Burns, J. & Vaivio, J., 2001. Management accounting change. *Management Accounting Research*, 12(4), pp.389–402.

Burrell, G. & Morgan, G., 1979. Sociological paradigms and organisational analysis. In *Sociological Paradigms and Organisational Analysis*.

Busco, C. & Quattrone, P., 2015. Exploring How the Balanced Scorecard Engages and Unfolds: Articulating the Visual Power of Accounting Inscriptions. *Contemporary Accounting Research*, 32(3), pp.1236–1262.

Callon, M., 1986. Some Elements of a Sociology of Translation: Domestication of the Scallops and the Fishermen of St Brieuc Bay. *Sociological Review Monograph*, 32, pp.196–233.

Caron, P. & Gely, R., 2004. What Law Schools Can Learn from billy Beane and the oakland Athletics. *Texas Law Review*, 82, pp.1483–1554.

Carruthers, B.G., 1995. Accounting, ambiguity, and the new institutionalism. *Accounting, Organizations and Society*, 20(4), pp.313–328.

Cavalluzzo, K.S. & Ittner, C.D., 2004. Implementing performance measurement innovations: evidence from government. *Accounting, Organizations and Society*, 29(3), pp.243–267.

Chapman, C.S., Cooper, D.J. & Miller, P., 2009a. *Accounting, organizations, and institutions: essays in honour of Anthony Hopwood*, Oxford University Press.

Chapman, C.S., Cooper, D.J. & Miller, P., 2009b. Linking accounting, organizations, and institutions. *Accounting, organizations and institutions*, pp.1–29.

Chua, W.F., 1988. Interpretive Sociology and Management Accounting Research — A Critical Review. *Accounting, Auditing & Accountability Journal*, 1(2), pp.59–79.

Chua, W.F., 1986. Radical Developments in Accounting Thought. *The Accounting Review*, 61(4).

Cloutier, C. & Langley, A., 2013. The Logic of Institutional Logics: Insights From French Pragmatist Sociology. *Journal of Management Inquiry*, 22(4), pp.360–380.

Cooper, D., 1983. Tidiness, muddle and things: Commonalities and divergencies in two approaches to management accounting research. *Accounting, Organizations and Society*, 8(2-3), pp.269–286.

Cooper, D.J. & Hopper, T., 2006. Critical Theorising in Management Accounting Research. *Handbooks of Management Accounting Research*, 1, pp.207–245.

Cooper, D.J. & Hopper, T.M., 1987. Critical studies in accounting. *Accounting, Organizations and Society*, 12(5), pp.407–414.

Covaleski, Mark A.Dirsmith, M.W., Covaleski, M.A. & Dirsmith, M.W., 1988. An Institutional Perspective on the Rise, Social Transformation, and Fall of a University Budget Category. *Administrative Science Quarterly*, 33(4), pp.562–587.

Creed, D.W.E. et al., 2014. Swimming in a Sea of Shame: Incorporating Emotion Into Explanations of Institutional Reproduction and Change. *Academy of Management Review*, 39(3), pp.275–301.

Creed, W.E.D., Scully, M.A. & Austin, J.R., 2002. Clothes Make the Person? The Tailoring of Legitimating Accounts and the Social Construction of Identity.

Croft, C., Currie, G. & Lockett, A., 2014. The Impact of Emotionally Important Social Identities on the Construction of a Managerial Leader Identity: A Challenge for Nurses in the English National Health Service. *Organization Studies*, 36(1), pp.113–131.

Crotty, M., 1998. *The Foundations of Social Research: Meaning and Perspective in the Research Process*, SAGE Publications.

Cyert, R.M. & March, J.G., 1963. A behavioral theory of the firm. *Englewood Cliffs, NJ*, 2.

Czarniawska, B., 2008. *How to misuse institutions and get away with it: Some reflections on institutional theory (ies).*, London: Sage.

Dambrin, C. & Robson, K., 2011. Tracing performance in the pharmaceutical industry: Ambivalence, opacity and the performativity of flawed measures. *Accounting, Organizations and Society*, 36(7), pp.428–455.

Deephouse, D.L. & Suchman, M., 2008. Legitimacy in organizational institutionalism. *The Sage handbook of organizational institutionalism*, 49, p.77.

Déjean, F., Gond, J.-P. & Leca, B., 2004. Measuring the Unmeasured: An Institutional Entrepreneur Strategy in an Emerging Industry. *Human Relations*, 57(6), pp.741–764.

Delbridge, R. & Edwards, T., 2008. Challenging conventions: Roles and processes during non-isomorphic institutional change. *Human Relations*, 61(3), pp.299–325.

Delmestri, G., 2006. Streams of inconsistent institutional influences: Middle managers as carriers of multiple identities. *Human Relations*, 59(11), pp.1515–1541.

Dent, J.F., 1991. Accounting and organizational cultures: A field study of the emergence of a new organizational reality. *Accounting, Organizations and Society*, 16(8), pp.705–732.

Dillard, J.F., Rigsby, J.T. & Goodman, C., 2004. The making and remaking of organization context: Duality and the institutionalization process. *Accounting, Auditing & Accountability Journal*, 17(4), pp.506–542.

DiMaggio, P., 1979. On Pierre Bourdieu. *American Journal of Sociology*, 84(6), pp.1460–1474 CR – Copyright © 1979 The Universi.

DiMaggio, P.J., 1988. Interest and agency in institutional theory. *Institutional patterns and organizations: Culture and environment*, 1, pp.3–22.

DiMaggio, P.J. & Powell, W.., 1983. The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Frields. *American Sociological Review*, 48(2), pp.147–160.

DiMaggio, P.J. & Powell, W.W., 1991. Introduction. In *The New Institutionalism in Organizational Analysis*. University of Chicago Press, pp. 1–38.

Dooren, W. van, Bouckaert, G. & Halligan, J., 2010. *Performance Management in the Public Sector*, Routledge.

Dunleavy, P. & Hood, C., 1994. From old public administration to new public management. *Public Money & Management*, 14(3), pp.9–16.

Dunn, M.B. & Jones, C., 2010. Institutional Logics and Institutional Pluralism: The Contestation of Care and Science Logics in Medical Education, 1967–2005. *Administrative Science Quarterly*, 55(1), pp.114–149.

Edelman, L.B. & Suchman, M.C., 1997. The Legal Environments of Organizations. *Annual Review of Sociology*, 23, pp.479–515.

Edwards, P., Ezzamel, M. & Robson, K., 2005. Budgetary reforms: Survival strategies and the structuration of organizational fields in education. *Accounting, Auditing & Accountability Journal*, 18(6), pp.733–755.

Elsbach, K.D. & Sutton, R.I., 1992. ACQUIRING ORGANIZATIONAL LEGITIMACY THROUGH ILLEGITIMATE ACTIONS: A MARRIAGE OF INSTITUTIONAL AND IMPRESSION MANAGEMENT THEORIES. *Academy of Management Journal*, 35(4), pp.699–738.

Emirbayer, M., 1997. Manifesto for a Relational Sociology. *American Journal of Sociology*, 103(2), pp.281–317.

Emirbayer, M. & Johnson, V., 2008. Bourdieu and organizational analysis. *Theory and Society*, 37(1), pp.1–44.

Emirbayer, M. & Mische, A., 1998. What Is Agency? *American Journal of Sociology*, 103(4), pp.962–1023.

Espeland, W.N. & Sauder, M., 2007. Rankings and Reactivity: How Public Measures Recreate Social Worlds. *American Journal of Sociology*, 113(1), pp.1–40.

Ezzamel, M., Robson, K., et al., 2007. Discourse and institutional change: "Giving accounts" and accountability. *Management Accounting Research*, 18(2), pp.150–171.

Ezzamel, M., Hyndman, N., et al., 2007. Experiencing institutionalization: the development of new budgets in the UK devolved bodies. *Accounting, Auditing & Accountability Journal*, 20(1), pp.11–40.

Ezzamel, M., Robson, K. & Stapleton, P., 2012. The logics of budgeting: Theorization and practice variation in the educational field. *Accounting, Organizations and Society*, 37(5), pp.281–303.

Fligstein, N., 2001. *The architecture of markets: An economic sociology of twenty-first-century capitalist societies*, Princeton University Press.

Fligstein, N., 1987. The Intraorganizational Power Struggle: Rise of Finance Personnel to Top Leadership in Large Corporations, 1919-1979. *American Sociological Review*, 52(1), pp.44–58.

Fligstein, N., 1985. The Spread of the Multidivisional Form Among Large Firms, 1919-1979. *American Sociological Review*, 50(3), pp.377–391.

Fligstein, N., 1990. *The transformation of corporate control*, Harvard University Press.

Free, C. & Qu, S.Q., 2011. The use of graphics in promoting management ideas. *Journal of Accounting & Organizational Change*, 7(2), pp.158–189.

Friedland, R., 2009. The Endless Fields of Pierre Bourdieu. *Organization*, 16(6), pp.887–917.

Friedland, R. & Alford, R., 1991. *Bringing Society Back In: Symbols, Practices and Institutional Contradictions*, University Of Chicago Press.

Gabbioneta, C. et al., 2013. The influence of the institutional context on corporate illegality. *Accounting, Organizations and Society*, 38(6-7), pp.484–504.

Garud, R., Jain, S. & Kumaraswamy, A., 2002. INSTITUTIONAL ENTREPRENEURSHIP IN THE SPONSORSHIP OF COMMON TECHNOLOGICAL STANDARDS: THE CASE OF SUN MICROSYSTEMS AND JAVA. *Academy of Management Journal*, 45(1), pp.196–214.

Giddens, A., 1979. *Central problems in social theory: Action, structure, and contradiction in social analysis*, Univ of California Press.

Giddens, A., 1984. The constitution of society: Outline of the theory of structure. Berkeley.

Gioia, D.A., Corley, K.G. & Hamilton, A.L., 2012. Seeking Qualitative Rigor in Inductive Research: Notes on the Gioia Methodology. *Organizational Research Methods*, 16(1), pp.15–31.

Glynn, M.A. & Lounsbury, M., 2005. From the Critics' Corner: Logic Blending, Discursive Change and Authenticity in a Cultural Production System*. *Journal of Management Studies*, 42(5), pp.1031–1055.

Goddard, A., 2010. Contemporary public sector accounting research – An international comparison of journal papers. *The British Accounting Review*, 42(2), pp.75–87.

Goffman, E., 1961. Asylums: Essays on the Social Situation of Mental Patients and Other Inmates.

Granlund, M., 2001. Towards explaining stability in and around management accounting systems. *Management Accounting Research*, 12(2), pp.141–166.

Greenwood, R. et al., 2011. Institutional Complexity and Organizational Responses. *The Academy of Management Annals*, 5(1), pp.317–371.

Greenwood, R. et al., 2010. The Multiplicity of Institutional Logics and the Heterogeneity of Organizational Responses. *Organization Science*, 21(2), pp.521–539.

Greenwood, R. et al., 2008. *The SAGE Handbook of Organizational Institutionalism*, SAGE.

Greenwood, R. & Hinings, C.R., 1996. UNDERSTANDING RADICAL ORGANIZATIONAL CHANGE: BRINGING TOGETHER THE OLD AND THE NEW INSTITUTIONALISM. *Academy of Management Review*, 21(4), pp.1022–1054.

Greenwood, R., Hinings, C.R. & Suddaby, R., 2002. THEORIZING CHANGE: THE ROLE OF PROFESSIONAL ASSOCIATIONS IN THE TRANSFORMATION OF INSTITUTIONALIZED FIELDS. *Academy of Management Journal*, 45(1), pp.58–80.

Greenwood, R. & Suddaby, R., 2006. INSTITUTIONAL ENTREPRENEURSHIP IN MATURE FIELDS: THE BIG FIVE ACCOUNTING FIRMS. *Academy of Management Journal*, 49(1), pp.27–48.

Guthrie, J., Olson, O. & Humphrey, C., 1999. Debating Developments in New Public Financial Management: The Limits of Global Theorising and Some New Ways Forward. *Financial Accountability and Management*, 15(3&4), pp.209–228.

Halachmi, A. & Bouckaert, G., 1996. *Organizational Performance and Measurement in the Public Sector: Toward Service, Effort, and Accomplishment Reporting* First., Quorum Books.

Hampton, M.M., 1999. Work Groups i Gabriel, Y., Organizations in Depth. The Psychoanalysis of Organizations.

Hardy, C. & Maguire, S., 2008. Institutional entrepreneurship. *The Sage handbook of organizational institutionalism*, pp.198–217.

Haveman, H.A. & Rao, H., 1997. Structuring a theory of moral sentiments: institutional and organizational coevolution in the early thrift industry 1. *American Journal of Sociology*, 102(6), pp.1606–1651.

Hayne, C. & Free, C., 2014. Hybridized professional groups and institutional work: COSO and the rise of enterprise risk management. *Accounting, Organizations and Society*, 39(5), pp.309–330.

Hirsch, P.M. & Lounsbury, M., 1997. Putting the Organization Back into Organization Theory Action, Change, and the" New" Institutionalism. *Journal of Management Inquiry*, 6(1), pp.79–88.

Holm, P., 1995. The dynamics of institutionalization: Transformation processes in Norwegian fisheries. *Administrative science quarterly*, pp.398–422.

Hood, C., 1991. a Public Management for All Seasons? *Public Administration*, 69(1), pp.3–19.

Hood, C., 1995. The "new public management" in the 1980s: Variations on a theme. *Accounting, Organizations and Society*, 20(2–3), pp.93–109.

Hopper, T. & Armstrong, P., 1991. Cost accounting, controlling labour and the rise of conglomerates. *Accounting, Organizations and Society*, 16(5-6), pp.405–438.

Hopper, T. & Bui, B., 2015. Has Management Accounting Research been critical? *Management Accounting Research*.

Hopper, T. & Major, M., 2007. Extending Institutional Analysis through Theoretical Triangulation: Regulation and Activity-Based Costing in Portuguese Telecommunications. *European Accounting Review*, 16(1), pp.59–97.

Hopper, T., Otley, D. & Scapens, B., 2001. British Management Accounting Research: Whence and Whither: Opinions and Recollections. *The British Accounting Review*, 33(3), pp.263–291.

Hopper, T. & Powell, A., 1985. Making sense of research into the organizational and social aspects of management accounting: A review of its underlying assumptions. *Journal of management Studies*, 1985(September).

Hopper, T. & Powell, A., 1985. MAKING SENSE OF RESEARCH INTO THE ORGANIZATIONAL AND SOCIAL ASPECTS OF MANAGEMENT ACCOUNTING: A REVIEW OF ITS UNDERLYING ASSUMPTIONS [1]. *Journal of Management Studies*, 22(5), pp.429–465.

Hopwood, A.G., 1976. Editorial. *Accounting, Organizations and Society*, 1(4), pp.287–288.

Hopwood, A.G., 1983. On trying to study accounting in the contexts in which it operates. *Accounting, Organizations and Society*, 8(2-3), pp.287–305.

Hopwood, A.G., 1987. The archeology of accounting systems. *Accounting, Organizations and Society*, 12(3), pp.207–234.

Hughes, E.C., 1936. The Ecological Aspect of Institutions. *American Sociological Review*, 1(2), pp.180–189 CR – Copyright © 1936 American Sociol.

Humphrey, C., Miller, P. & Scapens, R.W., 1993. Accountability and Accountable Management in the UK PublicSector. *Accounting, Auditing & Accountability; Accountability Journal*, 6(3).

Hwang, H. & Powell, W.W., 2009. The Rationalization of Charity : The Influences of Professionalism in the Nonprofit Sector. *Administrative Science Quarterly*, 54, pp.268–298.

Ittner, C.D., Larcker, D.F. & Ittner, Christopher D.Larcker, D.F., 1998. Innovations in Performance Measurement: Trends and Research Implications. *Journal of Management Accounting Research*, 10, pp.205–238.

Jarzabkowski, P., 2009. Doing which work? A practice approach to institutional pluralism. In *Institutional work: …*. pp. 284–316. 4

Jay, J., 2012. Navigating Paradox as a Mechanism of Change and Innovation in Hybrid Organizations. *Academy of Management Journal*, 56(1), pp.137–159.

Jeacle, I., 2012. Accounting and popular culture: framing a research agenda I. Jeacle, ed. *Accounting, Auditing & Accountability Journal*, 25(4), pp.580–601.

Jeacle, I., 2009. "Going to the movies": accounting and twentieth century cinema. *Accounting, Auditing & Accountability Journal*, 22(5), pp.677–708.

Jeacle, I. & Carter, C., 2012. Fashioning the popular masses: accounting as mediator between creativity and control I. Jeacle, ed. *Accounting, Auditing & Accountability Journal*, 25(4), pp.719–751.

Jeacle, I. & Carter, C., 2011. In TripAdvisor we trust: Rankings, calculative regimes and abstract systems. *Accounting, Organizations and Society*, 36(4-5), pp.293–309.

Kaplan, R. & Norton, D., 1996. *The Balanced Scorecard: Translating Strategy Into Action*, Harvard Business Press.

Karpik, L., 2010. *Valuing the Unique: The Economics of Singularities*, Princeton University Press.

Kerr, C., 1963. *The uses of the university*, Harvard University Press.

Kodeih, F. & Greenwood, R., 2013. Responding to Institutional Complexity: The Role of Identity. *Organization Studies*, 35(1), pp.7–39.

Kornberger, M. & Carter, C., 2010. Manufacturing competition: how accounting practices shape strategy making in cities. *Accounting, Auditing & Accountability*, 23(3), pp.325–349.

Kraatz, M.S., 2009. Leadership as institutional work: A bridge to the other side. *Institutional work: Actors and agency in institutional studies of organizations*, pp.59–91.

Kraatz, M.S. & Block, E.S., 2008. Organizational implications of institutional pluralism. *The Sage handbook of organizational institutionalism*, 840.

Kurunmaki, L., 1999. Making an accounting entity: the case of the hospital in Finnish health care reforms. *European Accounting Review*, 8(2), pp.219–237.

Kurunmaki, L., Lapsley, I. & Melia, K., 2003. Accountingization v. legitimation: a comparative study of the use of accounting information in intensive care. *Management Accounting Research*, 14(2), pp.112–139.

Kurunmaki, L. & Miller, P., 2006. Modernising Government: The Calculating Self, Hybridisation and Performance Measurement. *Financial Accountability and Management*, 22(1), pp.87–106.

Lapsley, I., 2000. Management accounting and the state: Making sense of complexity. *Management Accounting Research*, 11(2), pp.169–173.

Lapsley, I., 2009. New Public Management: The Cruellest Invention of the Human Spirit? 1. *Abacus*, 45(1), pp.1–21.

Lapsley, I., 2008. THE NPM AGENDA: BACK TO THE FUTURE. *Financial Accountability & Management*, 24(1), pp.77–96.

Lapsley, I. & Pallot, J., 2000. Accounting, management and organizational change: A comparative study of local government. *Management Accounting Research*, 11(2), pp.213–229.

Lapsley, I. & Skærbæk, P., 2012. Why the Public Sector Matters. *Financial Accountability & Management*, 28(November), pp.355–358.

Lapsley, I. & Wright, E., 2004. The diffusion of management accounting innovations in the public sector: a research agenda. *Management Accounting Research*, 15(3), pp.355–374.

Latour, B., 1986. Visualisation and cognition: thinking with eyes and hands. *Knowledge and Society: studies in the Sociology of Culture Past and Present*, 6, pp.1–40.

Lawrence, T.B., Hardy, C. & Phillips, N., 2002. INSTITUTIONAL EFFECTS OF INTERORGANIZATIONAL COLLABORATION: THE EMERGENCE OF PROTO-INSTITUTIONS. *Academy of Management Journal*, 45(1), pp.281–290.

Lawrence, T.B. & Suddaby, R., 2006. Institutions and Institutional Work. In S. Clegg et al., eds. *The Sage Hand book of Organization Studies*. SAGE, pp. 215–254.

Lawrence, T.B., Suddaby, R. & Leca, B., 2011. *Institutional work: Actors and agency in institutional studies of organizations*, Cambridge University Press.

Lawrence, T.B., Suddaby, R. & Leca, B., 2009. Introduction: Theorizing and studying institutional work. In *Institutional Work: Actors and Agency in Institutional …*. pp. 1–28.

Leca, B., Battilana, J. & Boxenbaum, E., 2008. *Agency and institutions: A review of institutional entrepreneurship*, Harvard Business School Cambridge, MA.

Leca, B. & Naccache, P., 2006. A Critical Realist Approach To Institutional Entrepreneurship. *Organization*, 13(5), pp.627–651.

Lee, K. & Pennings, J.M., 2002. MIMICRY AND THE MARKET: ADOPTION OF A NEW ORGANIZATIONAL FORM. *Academy of Management Journal*, 45(1), pp.144–162.

Llewellyn, S. & Tappin, E., 2003. Strategy in the Public Sector: Management in the Wilderness. *Journal of Management Studies*, 40(4), pp.955–982.

Lounsbury, M., 2007. A tale of two cities: Competing logics and practice variation in the professionalizing of mutual funds. *Academy of Management Journal*, 50(2), pp.289–307.

Lounsbury, M., 2008. Institutional rationality and practice variation: New directions in the institutional analysis of practice. *Accounting, Organizations and Society*, 33(4–5), pp.349–361.

Lounsbury, M., 2001. Institutional Sources of Practice Variation: Staffing College and University Recycling Programs. *Administrative Science Quarterly*, 46(1), p.29.

Lounsbury, M., 2002. INSTITUTIONAL TRANSFORMATION AND STATUS MOBILITY: THE PROFESSIONALIZATION OF THE FIELD OF FINANCE. *Academy of Management Journal*, 45(1), pp.255–266.

Lounsbury, M. & Crumley, E.T., 2007. New Practice Creation: An Institutional Perspective on Innovation. *Organization Studies*, 28(7), pp.993–1012.

Lukka, K., 2007. Management accounting change and stability: Loosely coupled rules and routines in action. *Management Accounting Research*, 18(1), pp.76–101.

Macnab, A., 2011. *Can the Balanced Scorecard supported by Strategic Objective Costing improve the Governance of Public Sector bodies such as Botanic Gardens?* Unviersity of Edinburgh.

Macnab, A. & Mitchell, F., 2014. Outcome Budgeting in the Public Sector: Challenges and Solutions. An Exploratory Empirical Study. *World Congress of Accountants*.

Macnab, A. & Mitchell, F., 2016. Outcome Costing: A Significant Advancement For Determining Public Sector Cost- Effectiveness. *Financial Management*, A CIMA FM (JANUARY).

Macnab, A. & Mitchell, F., 2010. Strategic Objective Costing - Supporting the Balanced Scorecard. *CGMA Report*.

Macnab, A., Mitchell, F. & Carr, C., 2010. Garden designs to Improve the Line of Sight: Implementation of the balanced Scorecard and an Alternative Costing System at the Royal Botanic Garden Edinburgh. *CIMA Research Executive Summary Series*, 6(7).

Maguire, S., Hardy, C. & Lawrence, T.B., 2004. INSTITUTIONAL ENTREPRENEURSHIP IN EMERGING FIELDS: HIV/AIDS TREATMENT ADVOCACY IN CANADA. *Academy of Management Journal*, 47(5), pp.657–679.

Maguire, S., Phillips, N. & Hardy, C., 2001. When `Silence = Death', Keep Talking: Trust, Control and the Discursive Construction of Identity in the Canadian HIV/AIDS Treatment Domain. *Organization Studies*, 22(2), pp.285–310.

Major, M. & Hopper, T., 2005. Managers divided: Implementing ABC in a Portuguese telecommunications company. *Management Accounting Research*, 16(2), pp.205–229.

Malmi, T., 1999. Activity-based costing diffusion across organizations: an exploratory empirical analysis of Finnish firms. *Accounting, Organizations and Society*, 24(8), pp.649–672.

Marquis, C. & Lounsbury, M., 2007. VIVE LA RESISTANCE: COMPETING LOGICS AND THE CONSOLIDATION OF U.S. COMMUNITY BANKING. *Academy of Management Journal*, 50(4), pp.799–820.

Martì, I. & Mair, J., 2009. Bringing change into the lives of the poor: Entrepreneurship outside traditional boundaries. *Institutional work: Actors and agency in institutional studies of organizations*, pp.92–119.

McPherson, C.M. & Sauder, M., 2013a. Logics in Action: Managing Institutional Complexity in a Drug Court. *Administrative Science Quarterly*, 58(2), pp.165–196.

McPherson, C.M. & Sauder, M., 2013b. Logics in Action: Managing Institutional Complexity in a Drug Court. *Administrative Science Quarterly*, 58(2), pp.165–196.

Meyer, J.W. & Rowan, B., 1977. Institutionalized Organizations: Formal Structure as Myth and Ceremony. *American Journal of Sociology*, 83(2), pp.340–363.

Meyer, J.W. & Scott, W.R., 1983. Centralization and the legitimacy problems of local government. *Organizational environments: Ritual and rationality*, pp.199–215.

Meyer, R.E., 2006. Review Essay Visiting Relatives: Current Developments in the New Sociology of Knowledge. *Organization*, 13(5), pp.725–738.

Meyer, R.E. et al., 2013. The Visual Dimension in Organizing, Organization, and Organization Research: Core Ideas, Current Developments, and Promising Avenues. *The Academy of Management Annals*, 7(1), pp.489–555.

Miller, P., 1991. Accounting innovation beyond the enterprise: Problematizing investment decisions and programming economic growth in the U.K. in the 1960s. *Accounting, Organizations and Society*, 16(8), pp.733–762.

Miller, P., 2001. Governing by Numbers: Why Calculative Practices Matter. *Social Research*, 68(2), pp.379–396.

Miller, P., 1990. On the interrelations between accounting and the state. *Accounting, Organizations and Society*, 15(4), pp.315–338.

Miller, P. & Hopwood, A.G., 1994. *Accounting as Social and Institutional Practice*, Cambridge University Press Cambridge.

Miller, P., Kurunmäki, L. & O'Leary, T., 2008. Accounting, hybrids and the management of risk. *Accounting, Organizations and Society*, 33(7-8), pp.942–967.

Miller, P. & Napier, C., 1993. Genealogies of calculation. *Accounting, Organizations and Society*, 18(7-8), pp.631–647.

Miller, P. & O'Leary, T., 1987. Accounting and the construction of the governable person. *Accounting, Organizations and Society*, 12(3), pp.235–265.

Miller, P. & Power, M., 2013. Accounting, Organizing, and Economizing: Connecting Accounting Research and Organization Theory. *The Academy of Management Annals*, 7(1), pp.557–605.

Mizruchi, M.S. & Fein, L.C., 1999. The Social Construction of Organizational Knowledge: A Study of the Uses of Coercive, Mimetic, and Normative Isomorphism. *Administrative Science Quarterly*, 44(4), p.653.

Modell, S., 2009. Institutional research on performance measurement and management in the public sector accounting literature: a review and assessment. *Financial Accountability & Management*, 25(August), pp.277–304.

Modell, S., 2015. Making institutional accounting research critical: dead end or new beginning? P. Judy Brown, Professor Jesse Dillard, ed. *Accounting, Auditing & Accountability Journal*, 28(5), pp.773–808.

Modell, S., 2001. Performance measurement and institutional processes: a study of managerial responses to public sector reform. *Management Accounting Research*, 12(4), pp.437–464.

Modell, S., 2004. Performance Measurement Myths in the Public Sector: A Research Note. *Financial Accountability and Management*, 20(1), pp.39–55.

Modell, S., 2005. Students as consumers?: An institutional field-level analysis of the construction of performance measurement practices. *Accounting, Auditing & Accountability Journal*, 18(4), pp.537–563.

Modell, S. & Humphrey, C., 2008. Balancing acts in qualitative accounting research. *Qualitative Research in Accounting & Management*, 5(2), pp.92–100.

Modell, S., Jacobs, K. & Wiesel, F., 2007. A process (re)turn?: Path dependencies, institutions and performance management in Swedish central government. *Management Accounting Research*, 18(4), pp.453–475.

Mutch, A., 2007. Reflexivity and the Institutional Entrepreneur: A Historical Exploration. *Organization Studies*, 28(7), pp.1123–1140.

Niven, P.R., 2011. *Balanced scorecard: Step-by-step for government and nonprofit agencies*, John Wiley & Sons.

Nørreklit, H., 2003. The Balanced Scorecard: what is the score? A rhetorical analysis of the Balanced Scorecard. *Accounting, Organizations and Society*, 28(6), pp.591–619.

Oakes, L.S., Townley, B. & Cooper, D.J., 1998. Business Planning as Pedagogy: Language and Control in a Changing Institutional Field. *Administrative Science Quarterly*, 43(2), p.257.

Oliver, C., 1991. STRATEGIC RESPONSES TO INSTITUTIONAL PROCESSES. *Academy of Management Review*, 16(1), pp.145–179.

Oliver, C., 1992. The Antecedents of Deinstitutionalization. *Organization Studies*, 13(4), pp.563–588.

Olson, O., Guthrie, J. & Humphrey, C., 1998. *Global warning: Debating international developments in new public financial management*, Cappelen Akademisk Folag,.

Olson, O., Humphrey, C. & Guthrie, J., 2001. Caught in an evaluatory trap: a dilemma for public services under NPFM. *European Accounting Review*, 10(3), pp.505–522.

Otley, D.T. & Berry, A.J., 1994. Case study research in management accounting and control. *Management Accounting Research*, 5(1), pp.45–65.

Pache, A.-C. & Santos, F., 2012. Inside the Hybrid Organization: Selective Coupling as a Response to Competing Institutional Logics. *Academy of Management Journal*, 56(4), pp.972–1001.

Pache, A.-C. & Santos, F., 2010. WHEN WORLDS COLLIDE: THE INTERNAL DYNAMICS OF ORGANIZATIONAL RESPONSES TO CONFLICTING INSTITUTIONAL DEMANDS. *Academy of Management Review*, 35(3), pp.455–476.

Parker, L.D., 2012. Qualitative management accounting research: Assessing deliverables and relevance. *Critical Perspectives on Accounting*, 23(1), pp.54–70.

Parker, L.D., 2003. Qualitative research in accounting and management: the emerging agenda. *Journal of Accounting and Finance*, 2, pp.15–30.

Parsons, T., 1951. *The Social System*,

Pettersen, I.J., 2010. Implementing management accounting reforms in the public sector: the difficult journey from intentions to effects. *European Accounting Review*, 10(3), pp.561–581.

Phillips, N., Lawrence, T.B. & Hardy, C., 2004. DISCOURSE AND INSTITUTIONS. *Academy of Management Review*, 29(4), pp.635–652.

Podolny, J.M.J., 1994. Market Uncertainty and the Social Character of Economic Exchange. *Administrative Science Quarterly*, 39(3), pp.458–483.

Pollitt, C., 1990. *Managerialism and the Public Services: The Anglo-American Experience*, Oxford: Basil Blackwell.

Pollitt, C., 2006a. Performance Information for Democracy: The Missing Link? *Evaluation*, 12(1), pp.38–55.

Pollitt, C., 2006b. Performance Management in Practice: A Comparative Study of Executive Agencies. *Journal of Public Administration Research and Theory*, 16(1), pp.25–44.

Pollitt, C. & Bouckaert, G., 2011. *Public Management Reform: A Comparative Analysis - New Public Management, Governance, and the Neo-Weberian State*, Oxford University Press.

Power, M., 2004. Counting, Control and Calculation: Reflections on Measuring and Management. *Human Relations*, 57(6), pp.765–783.

Power, M., 1994. The audit society in: Accounting as social and institutional practice.

Power, M., 1997. *The Audit Society: Rituals of Verification*, Oxford University Press.

Power, M. & Laughlin, R., 1992. Critical theory and accounting. *Critical management studies*, pp.113–135.

Purdy, J.M. & Gray, B., 2009. Conflicting Logics, Mechanisms of Diffusion, and Multilevel Dynamics in Emerging Institutional Fields. *Academy of Management Journal*, 52(2), pp.355–380.

Qu, S.Q. & Cooper, D.J., 2011. The role of inscriptions in producing a balanced scorecard. *Accounting, Organizations and Society*, 36(6), pp.344–362.

Quattrone, P., 2009. Books to be practiced: Memory, the power of the visual, and the success of accounting. *Accounting, Organizations and Society*, 34(1), pp.85–118.

Rao, H., 1998. Caveat Emptor: The Construction of Nonprofit Consumer Watchdog Organizations. *American Journal of Sociology*, 103(4), pp.912–961.

Rao, H., Monin, P. & Durand, R., 2003. Institutional Change in Toque Ville: Nouvelle Cuisine as an Identity Movement in French Gastronomy. *American Journal of Sociology*, 108(4), pp.795–843.

Reay, T., Golden-Biddle, K. & Germann, K., 2006. LEGITIMIZING A NEW ROLE: SMALL WINS AND MICROPROCESSES OF CHANGE. *Academy of Management Journal*, 49(5), pp.977–998.

Reay, T. & Hinings, C.R., 2009. Managing the Rivalry of Competing Institutional Logics. *Organization Studies*, 30(6), pp.629–652.

Reay, T. & Hinings, C.R. (BOB), 2005. The Recomposition of an Organizational Field: Health Care in Alberta. *Organization Studies*, 26(3), pp.351–384.

Ribeiro, J.A. & Scapens, R.W., 2006. Institutional theories in management accounting change: Contributions, issues and paths for development. *Qualitative Research in Accounting & Management*, 3(2), pp.94–111.

Richardson, A.J., 2012. Paradigms, theory and management accounting practice: A comment on Parker (forthcoming) "Qualitative management accounting research: Assessing deliverables and relevance." *Critical Perspectives on Accounting*, 23(1), pp.83–88.

Robson, K., 1992. Accounting numbers as "inscription": Action at a distance and the development of accounting. *Accounting, Organizations and Society*, 17(7), pp.685–708.

Rodriguez, L. & Dimitrova, D. V., 2011. The levels of visual framing. *Journal of Visual Literacy*, 30(1), pp.48–65.

Rose, N., 1991. Governing by numbers: Figuring out democracy. *Accounting, Organizations and Society*, 16(7), pp.673–692.

Rose, N. & Miller, P., 1992. Political Power beyond the State: Problematics of Government. *The British Journal of Sociology*, 43(2), p.173.

Ruef, M. & Scott, W.R., 2008. A Multidimensional Model of Organizational Legitimacy: Hospital Survival in Changing Institutional Environments. *Administrative Science Quarterly*, 43(4), pp.877–904.

Ryan, G.W. & Bernard, H.R., 2003. Techniques to Identify Themes. *Field Methods*, 15(1), pp.85–109.

Sauder, M. & Espeland, W.N., 2009. The Discipline of Rankings : Tight Coupling and Organizational Change. *American Sociological Review*, 74, pp.63–82.

Scapens, R.W., 1994. Never mind the gap: towards an institutional perspective on management accounting practice. *Management Accounting Research*, 5(3–4), pp.301–321.

Schwartz, H.S., 1992. *Narcissistic Process and Corporate Decay: The Theory of the Organizational Ideal*, NYU Press.

Scott, W.R. et al., 2000. *Institutional change and healthcare organizations: From professional dominance to managed care*, University of Chicago Press.

Scott, W.R., 1995. Institutions and organizations.

Scott, W.R., 2013. *Institutions and Organizations: Ideas, Interests, and Identities* Fourth ed., SAGE Publications, Inc.

Selznick, P., 1948. Foundations of the Theory of Organization. *American sociological review*, pp.25–35.

Seo, M.-G. & Creed, W.E.D., 2002. Institutional Contradictions, Praxis, and Institutional Change: A Dialectical Perspective. *Academy of Management Review*, 27(2), pp.222–247.

Sherer, P.D. & Lee, K., 2002. Institutional Change In Large law Firms: A Resource Dependency and Institutional Perspective. *Academy of Management Journal*, 45(1), pp.102–119.

Simon, H.A. et al., 1954. *Centralization Vs. Decentralization in Organizing the Controller's Department: A Research Study and Report.*, New York: Controllership Foundation.

Smets, M., Morris, T. & Greenwood, R., 2012. FROM PRACTICE TO FIELD: A MULTI-LEVEL MODEL OF PRACTICE-DRIVEN INSTITUTIONAL CHANGE. *Academy of Management Journal*, 55(4), pp.877–904.

Star, S.L. & Griesemer, J.R., 1989. Institutional Ecology, `Translations' and Boundary Objects: Amateurs and Professionals in Berkeley's Museum of Vertebrate Zoology, 1907-39. *Social Studies of Science*, 19(3), pp.387–420.

Strathern, M., 2000. The Tyranny of Transparency. *British Educational Research Journal*, 26(3), pp.309–321.

Suchman, M.C., 1995. MANAGING LEGITIMACY: STRATEGIC AND INSTITUTIONAL APPROACHES. *Academy of Management Review*, 20(3), pp.571–610.

Suddaby, R. & Greenwood, R., 2001. Colonizing knowledge : Commodification as a dynamic of jurisdictional expansion in professional service firms. *Human Relations*, 54(7), pp.933–953.

Swogger Jr, G., 1993. Group self-esteem and group performance. *The psychodynamics of organizations*, pp.99–118.

Thompson, J., 1967. Organizations in Action: Social Science Bases of Administrative Theory. Classics in Organization and Management Series. *Trans. Publishers*.

Thompson, M., 2011. Ontological Shift or Ontological Drift? Reality Claims, Epistemological Frameworks, and Theory Generation in Organization Studies. *Academy of Management Review*, 36(4), pp.754–773.

Thornton, P.H., 2004. *Markets from culture: Institutional logics and organizational decisions in higher education publishing*, Stanford University Press.

Thornton, P.H., 2001. Personal Versus Market Logics of Control: A Historically Contingent Theory of the Risk of Acquisition. *Organization Science*, 12(3), pp.294–311. 18p. 3 Charts.

Thornton, P.H., 2002. THE RISE OF THE CORPORATION IN A CRAFT INDUSTRY: CONFLICT AND CONFORMITY IN INSTITUTIONAL LOGICS. *Academy of Management Journal*, 45(1), pp.81–101.

Thornton, P.H. & Ocasio, W., 1999. Institutional Logics and the Historical Contingency of Power in Organizations: Executive Succession in the Higher Education Publishing Industry, 1958-1990. *American Journal of Sociology*, 105(3), pp.801–843.

Thornton, P.H., Ocasio, W. & Lounsbury, M., 2012. *The Institutional Logics Perspective: A New Approach to Culture, Structure and Process*, OUP Oxford.

Thornton, P.H.P. & Ocasio, W., 2008. Institutional logics. *The Sage handbook of organizational …*, 840, pp.99–129.

Tolbert, P.S. & Zucker, L.G., 1983. Institutional sources of change in the formal structure of organizations: The diffusion of civil service reform, 1880-1935. *Administrative science quarterly*, pp.22–39.

Tolbert, P.S. & Zucker, L.G., 1996. The Institutionalization of Institutional Theory. In S. Clegg, C. Hardy, & N. Nord, eds. *Handbook of organization studies*. SAGE, pp. 175–190.

Townley, B., 2014. Bourdieu and Organizational Theory: A Ghostly Apparition? In P. S. Adler et al., eds. *The Oxford Handbook of Sociology, Social Theory, And Organization Studies Contemporary Currents*. p. 816.

Townley, B., 1997. The Institutional Logic of Performance Appraisal. *Organization Studies*, 18(2), pp.261–285.

Townley, B., 2002. THE ROLE OF COMPETING RATIONALITIES IN INSTITUTIONAL CHANGE. *Academy of Management Journal*, 45(1), pp.163–179.

Townley, B., Cooper, D.J. & Oakes, L., 2003. Performance Measures and the Rationalization of Organizations. *Organization Studies*, 24(7), pp.1045–1071.

Tracey, P., Phillips, N. & Jarvis, O., 2011. Bridging Institutional Entrepreneurship and the Creation of New Organizational Forms: A Multilevel Model. *Organization Science*, 22(1), pp.60–80.

Vaivio, J., 2008. Qualitative management accounting research: rationale, pitfalls and potential. *Qualitative Research in Accounting & Management*, 5(1), pp.64–86.

Voronov, M. & Vince, R., 2012. Integrating emotions into the analysis of institutional work. *Academy of Management Review*, 37(1), pp.58–81.

Weber, M., 1968. Economy and society; an outline of interpretive sociology.

Weber, M., 2009. *From Max Weber: essays in sociology*, Routledge.

Weber, M., 1904. The protestant ethic and the spirit of capitalism.

Weick, K.E., 1976. Educational Organizations as Loosely Coupled Systems. *Administrative Science Quarterly*, 21(1), pp.1–19.

Wiesel, F., Modell, S. & Moll, J., 2011. Customer Orientation and Management Control in the Public Sector: A Garbage Can Analysis. *European Accounting Review*, 20(3), pp.551–581.

Yu, K.-H., 2013. Institutionalization in the Context of Institutional Pluralism: Politics as a Generative Process. *Organization Studies*, 34(1), pp.105–131.

Zajac, E.J. & Westphal, J.D., 1994. The Costs and Benefits of Managerial Incentives and Monitoring in Large U.S. Corporations: When is More not Better? *Strategic Management Journal*, 15(S1), pp.121–142.

Zilber, T.B., 2011. Institutional Multiplicity in Practice: A Tale of Two High-Tech Conferences in Israel. *Organization Science*, 22(6), pp.1539–1559.

Zilber, T.B., 2002. INSTITUTIONALIZATION AS AN INTERPLAY BETWEEN ACTIONS, MEANINGS, AND ACTORS: THE CASE OF A RAPE CRISIS CENTER IN ISRAEL. *Academy of Management Journal*, 45(1), pp.234–254.

Zucker, L.G., 1977. The role of institutionalization in cultural persistence. *American sociological review*, pp.726–743.