Critical Action Research: Exploring Organisational Learning and Sustainability in a Kenyan Context

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Abstract

The main goal of this study was to deepen an understanding of exploring organisational learning and sustainability using critical action research methodology in a Kenyan context. The research process involved a group of 23 middle level management employees of the National Museums of Kenya (NMK) in identifying and acting on sustainability issues. This group was designed and cultivated as a community of practice for organisational learning purposes. The basic premise underlying the study is that exploring agential, structural and cultural interactions (morphogenetic relationships) through educational interventions (communicative interactions) in a community of practice can deepen context specific understanding of organisational learning and sustainability. I developed this argument by drawing on a complex philosophical framework that brought together assumptions from Archerian social realism, Deweyan pragmatism and critical theory. The framework underpinned three distinct and yet related theoretical perspectives – the Archerian morphogenetic approach, Habermasian critical theory and Lave and Wenger's communities of practice. The Archerian morphogenetic approach and Habermasian critical theory respectively provided ontological and epistemological perspectives for the study. Lave and Wenger's communities of practice approach provided both a unit of analysis (the NMK community) and a social theory of learning to complement the Archerian and Habermasian theoretical perspectives.

I generated data within a 14-month period between March 2005 and March 2007 in three distinct but integrally intertwined broad action research cycles of inquiry. During the first cycle, the research group identified contextual issues related to organisational learning and sustainability. In the second cycle the group investigated the issues deeper and deliberated possibilities for social change and the emergence of sustainability. The final cycle delineated social learning outcomes from the study and explored ways of institutionalising social change processes. Throughout these cycles, I explored ways of knowing the social reality of enabling organisational learning and sustainability. The cycles were integral to communicative interactions, which I implemented as educational interventions for developing agency in the NMK community of practice. Data analysis was undertaken

within cyclical processes of entering and managing data, manual coding and developing categories, identifying themes, presenting results and validating findings.

Undertaking a collaborative critical organisational analysis of the NMK revealed various contextual factors that both constrained and enabled participant learning capabilities and reflexivity to address sustainability issues. These factors manifested as contextually mediated issues of communication and information flows, decision making and leadership (governance), staff motivation and development, financial management and the identity and role of the NMK. The research process promoted collective social action and innovation, fostered critical reflections and reflexivity, enhanced democratic deliberations and strengthened systemic thinking capabilities in the NMK community of practice. This study contributes to the body of literature on environmental education in its employment of a coherent and complex philosophical and theoretical framework for exploring organisational learning and sustainability.

Declaration

This thesis is submitted in accordance with the regulations for the degree of Doctor of Philosophy of Macquarie University. I declare that the work described herein is original, except where otherwise indicated and acknowledged. I further declare that this thesis has not, either in part or whole, been submitted for a higher degree to any other university or institution.

Abel Barasa Atiti

30 May 2008

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In loving memory of my father

To my mother, wife and children

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Acronyms

AIDS	Acquired Immuno-Deficiency Syndrome
BGCI	Botanic Gardens Conservation International
CBD	Convention on Biological Diversity
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CKRC	Constitution of Kenya Review Commission
CSRP	Civil Service Reform Programme
DEC	Directors Executive Committee
DFRD	District Focus for rural Development
EHS	Environmental Health and Safety
ERSWEC	Economic Recovery Strategy for Wealth and Employment Creation
ESD	Education for Sustainable Development
EU	European Union
FG	Focus Group
GSE	Graduate School of the Environment
HIV	Human Immunodeficiency Virus
HRDC	Human Resource Development Committee
IEEP	International Environmental Education programme
IMF	International Monetary Fund
IPR	Institute of Primate Research
IUCN	International Union for Conservation of Nature
KACA	Kenya Anti-Corruption Authority
KANU	Kenya African National Union
MDG	Millennium Development Goals
MU	Macquarie University
MUWA	Museum Welfare Association
NARC	National Rainbow Coalition
NEMA	National Environment Management Authority
NMK	National Museums of Kenya
NMKSP	National Museums of Kenya Support programme
NPEP	National Poverty Eradication Plan
PRGF	Poverty Reduction Growth Facility

PRSP	Poverty Reduction Strategy Paper
REEP	Regional Environmental Education Project
RISSEA	Research Institute of Swahili Studies in Eastern Africa
SADC	Southern Africa Development Community
SAPS	Structural and Adjustment Programmes
UN	United Nations
UNCED	United Nations Conference on Environment and Development
UNDESD	United Nations Decade of Education for Sustainable Development
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
WCED	World Commission on Environment and Development
WHO	World Health Organisation
WSSD	World Summit on Sustainable Development
WWF	World Wildlife Fund for Nature

PART 1   Introduction and Contextual Influences

This part introduces the study and discusses the contextual influences which shaped the research. It raises specific philosophical questions, and point out how I intend to address them to achieve the research aims. Key theoretical concepts underpinning the research are introduced. Part 1 also presents the broader social, organisational and epistemological contexts and their influences on the study. It examines the broader Kenyan context and provides details on the National Museums of Kenya (NMK) where I cultivated a community of practice for the purpose of enabling organisational learning and sustainability. This part locates the study in an intellectual contextual history of critical, reflexive and open-ended environmental education processes.

Part 1 contains the following chapters:

Chapter 1   Getting a Sense of the Research Terrain

Chapter 2   Shaping Contextual Influences

Chapter 1 Getting a Sense of the Research Terrain

1.1   Introduction

This study aims to provide a deeper understanding of organisational learning and sustainability within a Kenyan context. In this introductory chapter, I describe the research terrain in which I conducted a critical action research inquiry in and on my own organisation. Exploring organisational learning and sustainability at the National Museums of Kenya (NMK) was collaboratively undertaken with a group of 23 fellow employees. Data were generated between March 2005 and March 2007. This chapter maps my positioning as the researcher, the research aims and process, philosophical and theoretical frameworks and the contributions of the study. This is to enable readers to travel easily through the terrain I covered in order to gain insights into the implications of exploring organisational learning and sustainability within a specific context.

The central thesis of this study is that exploring *morphogenetic relationships* through *communicative interactions* in *communities of practice* can deepen context specific understanding of organisational learning and sustainability. To unpack this argument, the chapter introduces the philosophical and theoretical frameworks underpinning the study. It outlines Archerian (1995) morphogenetic approach, Habermasian (1984, 1987, 1996) critical theory and the Lave and Wenger (1991) *communities of practice* approach, as the major theoretical lenses for probing organisational learning and sustainability. I clarify key theoretical concepts that this research employs to advance the central thesis. After indicating contributions of the study, the chapter ends by outlining the flow of thesis chapters.

1.2   Positioning myself

My environmental education experiences and subjectivity unavoidably shape how I have reported findings from this study. I am writing from a background of a teacher, environmental educator, museum curator and critical action researcher. I am a trained

science teacher with five years teaching experience in Kenyan schools. I left teaching in 1994 to join the National Museums of Kenya as an education officer, a position that I held for ten years before being promoted to the management position of senior curator in 2004. As an education officer, I implemented environmental education programmes for a diverse audience using the NMK Nairobi Botanic Garden as a learning resource (e.g. Atiti, 2001, 2003a). My substantial training in environmental education is from Rhodes University with research interests in critical action research and teacher professional development (Atiti, 2003b). This has contributed to my strong beliefs in democratic values and social justice in society and workplaces. In my current management position, I identify with *good governance systems* that support employee participation in decision-making, equality and gender balance, tolerance to diversity and plurality, mobilisation of resources for social purposes and service-oriented leadership (Elkington, 1999).

I am a critical action researcher, environmental educator and reflexive manager interested in critiquing assumptions, values and power relations that constrain social change and fostering sustainability in society. For me, such critique requires more than merely presenting a radical approach. It requires an *emancipatory project*[1] of suggesting alternative assumptions based on critical theory perspectives such as social justice, participation and democratic deliberations (Stringer, 2007). My interest in exploring such alternatives is inspired by a combination of my academic and professional experiences. The basic premise is that an emancipatory approach to organisational learning and sustainability can be successfully accomplished through a collaborative partnership between an *insider* action researcher and members of an organisation.

Although multiple audiences exist for the findings presented here, I have written this report for practitioners and scholars within the overlapping fields of environmental education and education for sustainable development. Examples throughout the thesis report illustrate the diversity of disciplines and fields that informed my study. They include sustainability,

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[1] I am aware that there is much baggage attached to the notion of *emancipation*. I include it here as synergetic with the intentions of critical realism that forms the ontological basis of the study. I encourage readers not to judge the emancipatory intent of this critical action research based on an implicit assumption that *emancipation* is some ideal state to be achieved (McTaggart, 1996; see also Section 5.3.3).

sociology, organisational studies and educational action research. Findings discussed here will be of interest to researchers and educators seeking a theoretical and practical base for improving organisational learning and sustainability in their own contexts. However, these findings are context specific and based on only one case study (see Section 6.2.2 and 10.2.3). In terms of voice, I have used the first plural *we*, *our* and *us* to signify that I shared the same context and commitment with the participants on improving organisational learning and sustainability at the NMK. It is also a sign of solidarity as I experienced the same contextual factors with the participants. To provide the voice of the research participants, I have used single inverted commas for quotes from the verbatim data. I have used double inverted commas for quotes from reference works, and italics when indicating a term of use. Nevertheless, the use of the first person plural need not be seen as masking the differences or diversity among the research participants.

I have adopted a reflexive style of writing that incorporates the information about the Kenyan context, my position and those of participants and theoretical influences on the study (Schirato & Webb, 2003). This aims to allow readers to interrogate my personal involvement in generating insights on the complex reality of enabling organisational learning and sustainability. The quality and validity criteria that I describe later in Chapter 5 (see Section 5.5) should assist readers to judge the trustworthiness of the findings presented in Chapters 7 and 8. I regard myself as an empirical explorer as opposed to a mere researcher. While I endeavoured to fix my gaze within a given compass point (theoretical framework), I was watchful for emerging *stars* (theories) that would successful guide my explorations. This stems from the premise that *ways of knowing* organisational learning and sustainability, within a specific context, are not fixed. One has to keep searching to avoid just knowing what we already know.

Having explained my subjectivity and how this has shaped the emergence of this study, I outline the research aims and motivation for exploring organisational learning and sustainability.

1.3   Research aims and motivation for the study

Globally governments and organisations are facing unparalleled and complex environmental and sustainability issues associated with unstable and fast changing economic, political and social contexts (Benn & Dunphy, 2007). In Kenya such issues include high levels of poverty, the HIV/AIDS pandemic, food insecurity, loss of biodiversity, social inequity and poor governance systems (see Section 2.2 for details). At the time of this study, the NMK was undertaking major reforms in a programme known as *Museum in Change* to strengthen its capability to address some of these issues (see Sections 2.3). The Museum in Change Programme involved a review of the NMK legislative framework, revitalisation and expansion of the Nairobi Museum, reorganisation of the management structures and the development of human resources and public programmes. Implementation of these components aimed to reshape and revitalise the role of the NMK in heritage management and sustainable development (NMK, 2005). This research was designed to inquire into the Museum in Change Programme with a view to deepen understanding of organisational learning and sustainability.

Following Perry and Zuber-Skerritt (1992) I implemented this research as two distinct but integrally intertwined projects: the *core* and *thesis* action research projects (see Section 6.2.3). In the *core* action research project, I investigated the Museum in Change Programme with a group of 23 fellow employees, in order to improve organisational learning and sustainability practices at the NMK. I undertook the *thesis* action research project with the support of peers and academic supervisors to generate context specific and critical understanding of organisational learning and sustainability. The distinction between the two action research projects made research planning and reporting much easier, as explained in Chapter 6 and reflected upon in Chapter 10 (see Sections 6.2.3 and 10.2).

1.3.1 Research aims

The overall goal of the research was to deepen an understanding of ontological, epistemological and pedagogical implications of exploring organisational learning and sustainability using critical action research methodology. Specifically, the research aims were:

1. *To identify and act upon contextual issues related to organisational learning and sustainability*

    Chapter 7 (see Section 7.2) identifies various structural and cultural factors that pre-existed at the NMK to constrain the learning capabilities of participants to address sustainability issues (see also Section 9.2). Chapter 8 presents these factors within five broad areas as contextually mediated issues of communication and information flows, decision making and leadership, staff motivation and development, financial management and the identity and role of the NMK. Environmental education processes to act upon these issues generated useful insights into organisational learning and sustainability that are presented as social learning processes of change and development in Chapters 7 and 8.

2. *To critically review assumptions and values underlying the NMK with a view to exploring alternatives from critical theory perspectives*

    Through envisioning exercises and critical questioning of the organisational experiences of the participants, the research surfaces basic assumptions, values and power relations underlying the NMK as a social system (see Section 7.3; see Chapter 8). Assumptions and values based on interlocking attributes associated with a top-down mode of governance, a heritage conservation mandate, a belief in non-profit making, patronage and ethnicity in resource distribution and information secrecy were found to define the NMK as a social system (see Section 9.3). In my role as a critical environmental educator and action researcher, I have challenged those assumptions that constrained agential learning capabilities to enable organisational learning and sustainability. I explore democratic, pluralistic and more power-sharing alternatives based on Habermasian critical theory (see Chapter 8; see Section 9.3).

3. *To explore ways of knowing social reality of organisational learning and sustainability*

    Chapters 5 and 6 report on the critical action research methodology and research processes that I followed to explore ways of knowing the social reality of organisational learning and sustainability. As a result, the research has strengthened the learning capabilities and reflexivity of participants to address sustainability issues

through developed collective social actions, democratic deliberations, critical reflections and systemic thinking (see Section 4.4).

Three philosophical questions guided my exploration of organisational learning and sustainability in achieving the above-mentioned aims (see Sections 1.4 and 10.3):

- What constitutes the *social reality* of organisational learning and sustainability?
  I addressed this ontological question by drawing upon *Archerian social realism* (see Sections 1.4.1, 3.3 and 9.2).
- What are ways of *knowing* the social reality of organisational learning and sustainability?
  I addressed this epistemological question by utilising *Deweyan pragmatism* that underpins Habermasian critical theory and critical action research (see Sections 1.4.2, 3.4 and 9.4).
- How can we *access* ways of knowing the social reality of organisational learning and sustainability?
  I answered this methodological question by locating organisational learning and sustainability within *critical theory* tradition and action research method (see Chapters 5 and 6).

Before I introduce the philosophical assumptions underlying this research, I need to point out what motivated me to explore organisational learning and sustainability.

1.3.2 Motivation

The major motivation for undertaking this research is to contribute to improved organisational learning and sustainability practices in my own organisation. Previous research (see Atiti, 2003b) and professional experiences, as outlined in Section 1.2 influenced my choice for critical action research methodology (see Chapter 5). I am inspired by proponents of critical pedagogy such as Apple (2001), Giroux (1988, 2003) and Kincheloe (2004) who argue that educational practices are politically contested spaces. As a critical action researcher, I am interested in challenging dominant power relations in organisations in order to seek possibilities for democratic ones (see Section 3.4.3). This is

because to refuse to expose and challenge exploitative social and cultural relations in an organisation is to "take a position that supports oppression and powers that perpetuate it" (Kincheloe, 2004, p. 11). The study provides me with an opportunity to critically review assumptions and values underlying the NMK in order to explore critical alternatives.

In the next sections I make explicit the philosophical and theoretical frameworks within which I explored organisational learning and sustainability at the NMK.

1.4   Philosophical and theoretical frameworks of the study

Creswell (2007) points out that good research requires one to make explicit the philosophical and theoretical frameworks that shape and inform one's study. Exploring organisational learning and sustainability, as sought in this research, requires coherent philosophical and theoretical frameworks that emphasise context, reflexivity, criticality and open processes of learning and social change (Lotz-Sisitka, 2004; see Section 2.4.3). The study draws upon philosophical assumptions on critical realism, pragmatism and critical theory to explore organisational learning and sustainability at the NMK.

Figure 1.1 presents a combined model of the philosophical and theoretical frameworks used in this research. This model supports Fleetwood's (2004) assertion that the way researchers think social reality *is* (ontology) influences:

- what they think can be known about *it* (epistemology)

- how they think *it* can be investigated (methodology)

- the kinds of theories they think can be constructed about it (theoretical frameworks).

Figure 1.1   Philosophical and theoretical frameworks of the study
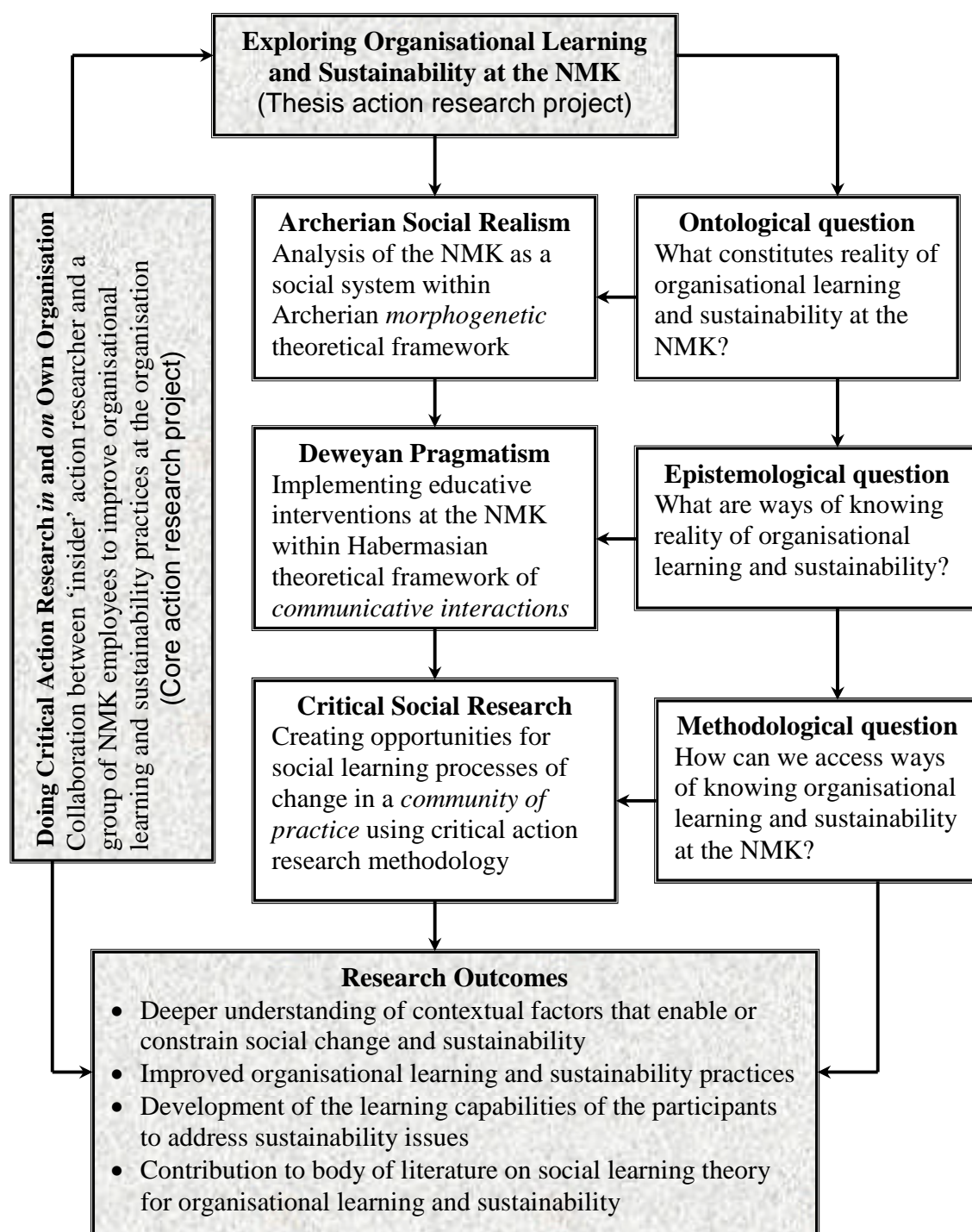
Yanow (2000) alerts us to the ontological, epistemological and methodological problems associated with *seeing* organisations and *observing* them learn. In order to overcome this difficulty, I have drawn upon three major theoretical frameworks to offer lenses for exploring organisational and sustainability at the NMK (see Figure 1.1).

1.   Archerian (1995) morphogenetic theoretical framework provides ontological lenses for analysing and explaining processes of social change and the emergence of organisational learning and sustainability (see Section 3.3).

2.   Habermasian critical theory (1984, 1987, 1996) provides a coherent framework for developing the learning capabilities of participants to address sustainability issues (see Section 3.4).

3.   The study utilises Lave and Wenger's (1991) *communities of practice* approach as a unit of analysis in which I explored *morphogenetic relationships* (Archer, 1995) through *communicative interactions* (Habermas, 1984, 1987, 1996).

This has made it possible to consider both the ontology and epistemology of organisational learning and sustainability. Wenger's notion of communities of practice advances *social learning theory* that encompasses both issues of *being*, and issues of *knowing* (Elkjaer, 2003). This research explores both organisational learning and sustainability as social learning processes of change and development in a community of practice (see Chapter 4). My motivation for drawing on theories that are rooted in different philosophical assumptions is based on Child's (1997) assertion that harmonious aspects of different and competing social theories can be integrated and used to complement one another in a single study. Furthermore, there is no single social theory of society that can capture the complex reality of enabling organisational learning and sustainability (Caldwell, 2006; Dunphy & Griffiths, 1994; see also Sections 1.5 and 3.2.1). In the next section, I introduce critical realism philosophy to position Archerian morphogenetic approach for analysing and explaining processes of social change.

1.4.1 Critical realism

Critical realism philosophy has much to offer in the understanding of organisational learning and sustainability within a specific context. This claim is supported by the growing

number of critical realist-inspired articles found in organisational and environmental education literature (e.g. Ackroyd, 2004; Fleetwood, 2004; Huckle, 1993, 2004; Lupele, 2007). I thus investigated my ontological question related to understanding the nature of social reality of organisational learning and sustainability at the NMK based upon critical realism[2] philosophical assumptions (Archer, 1995; Bhaskar, 1978; Sayer, 2000; see also Section 3.2.1). These assumptions involve notions of a stratified nature of reality, the centrality of emergent powers and causal mechanisms and the possibility of analytical dualism (see Bhaskar, 1978; Sayer, 2000).

I have particularly been inspired by *Archerian social realism* (Archer, 1985, 1995, 1996, 2000, 2003) that is defined by the principles of *emergence* and *analytical dualism[3]*. According to the principle of emergence, new social relations in an organisation can emerge on the basis of existing structural and cultural properties (Zeuner, 1999). This principle has its roots in Bhaskar's (1993) philosophy of development that Archer (1995) draws upon to argue for a relational social ontology that views agency, structure and culture as distinct strata of reality (see Section 3.2.3, 3.2.4 and 3.2.5). In her concept of society, Archer (1995) has argued that structure and culture are distinct from and irreducible to agency. However, structural and cultural emergent properties are dependent on human activity, but once they have emerged they possess irreducible causal powers (Willmott, 1997). These powers rest centrally on the importance of time in human affairs (Mutch, 2004). This implies that emergence occurs in time with new properties having relative autonomy from each other. In organisations such as the NMK, emergent structural and cultural properties have powers to confront employees with situations that provide both possibilities and constraints in terms of organisational learning and sustainability (see Chapters 7 and 8). Social realism asserts that such situations have an objective existence regardless of the perceptions and experiences of the employees. Although such perceptions are a key part of organisational analysis, they do not exhaust all possibilities of seeking and

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[2] I need to emphasise here that critical realism as employed in this study is *antithetical* to the discourses of *naive realism*, *empirical realism*, *positivism* or *scientism* (Fleetwood, 2004, p. 32).

[3] Analytical dualism is appropriate for theorising the interaction between structure and agency. It is analytical because the two are interdependent and dualist because each is held to possess its own emergent powers (Willmott, 1997).

explaining organisational change processes related to enabling organisational learning sustainability.

The principle of *analytical dualism* emphasises the necessity of studying the interplay between two levels without conflating them. Archer (1995) derives this principle from Lockwood's (1964) influential distinction between *social* and *system* integration[4] (Willmott, 2000; see Section 3.2.5). Analytical dualism entails non-conflationary theorising of the interplay between structure and agency, as well as that between culture and agency. For Archer (1985), the analysis of stability and change in organisations depends upon making such analytical distinctions. The distinct analyses of structural and cultural factors, which constrained agential learning capability and reflexivity to address sustainability at the NMK is a form of analytical dualism (see Section 7.2.2).

Following Archerian social realism, this study utilises the *morphogenetic* approach (Archer, 1995), as a coherent theoretical framework for analysing and explaining organisational change processes that occurred at the NMK (see Section 1.5.4, 3.3 and 9.2). I locate organisational learning and sustainability within agential, structural and cultural dynamics of the NMK. This entails viewing the NMK as a social (structural) and socio-cultural (cultural) system that is dependent on, but irreducible to the activities of employees. Understanding agential, structural and cultural interactions at the NMK is therefore central to enabling change and sustainability. I refer to such interactions as *morphogenetic relationships*. Section 1.5.4 of this chapter clarifies how this theoretical concept is applied in this report and Chapter 3 (see Section 3.3) provides more details on Archerian morphogenetic approach to organisational analysis.

According to Sayer (2000), critical realism is a philosophy of and for social sciences concerned with ontology. It has a relatively open stance towards epistemology. Mutch (2004, p. 430) describes critical realism as "a philosophical approach that seeks to be an ontological 'under-labourer' for a range of substantive theories" in the social sciences. This justifies why I have drawn upon *Deweyan pragmatism* as explained in the next section.

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[4] Social integration refers to the orderly or contradictory relations between actors; system integration refers to the orderly or contradictory relations between the parts of any social system (Willmott, 2000).

1.4.2 Deweyan pragmatism

One undertaking of epistemology is to provide theories of knowledge, how it can be acquired, its scope and validation (Kincheloe, 2003). Established as *ways of knowing* (Goldberger *et al.*, 1996), epistemological perspectives embody how we view reality and draw conclusions about truth, knowledge and authority (Reybold, 2002). Ways of knowing the social reality of organisational learning and sustainability, as sought in this study incorporate participant understanding of their contexts and processes of collective action. The research emphasises processes of collaborative ways of knowing and action through social learning in an organisational context (Greenwood & Levin, 2007; see Section 4.4.1). My purpose is to come to know how organisational experiences can be drawn upon to understand social change or stability in regard to sustainability. This argument is grounded in pragmatism, a philosophy that focuses on the actions, situations and consequences of inquiry (Creswell, 2007; see Hammersley, 1989 for a review of pragmatism). Pragmatism is not committed to any one system of philosophy and reality (Hammersley, 1989). Pragmatists believe in an external world independent of the mind, as well as those lodged in the mind (Cherryholmes, 1999). Pragmatists do not view social reality as an absolute reality. They agree that research always occurs in social, historical and political contexts (Biesta & Burbules, 2003). Pragmatism as a school of thought emerged primarily from the writings of three American thinkers: Charles Sanders Peirce[5], William James and John Dewey. I am particularly interested in Dewey's ideas about knowing and democracy (see also Section 5.3.2; see Biesta & Burbules, 2003 for details).

Deweyan pragmatism views knowing as a *creative* action embedded in a situation (Joas, 1993; see also Section 4.2.2). The underlying assumption is that "all knowledge is created within a historical context that gives life and meaning to human experience" (Darder *et al.*, 2003, p.12; see also Section 3.4.1). This research grounds ways of knowing in the organisational experiences of the participants and Kenyan contextual influences (see Sections 3.4.1 and 7.3; see also Chapter 2). Deweyan pragmatism makes an essential

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[5] Archer (2003, p. 9) draws on Peircian pragmatism to present the theory of inner speech which views "internal conversation" as a central mechanism in determining our being in the world. The internal conversation (dialogue) refers to how our personal emergent powers are exercised *on* and *in* organisations and is central to communicative interactions as advanced by the research (see Section 3.2.3). This provides consistency in the use of both Archerian morphogenetic approach and Habermasian critical theory in the study (see also Section 3.4.1).

distinction between experience and knowing. It emphasises dialogue among actors with different ways of knowing (Demetrion, 2000) and upholds pluralism where ways of knowing the reality of social change are dynamic, changing and context bound. In this research, I respected the diversity of the research participants and their organisational experiences as part of upholding pluralism (see Section 6.3.2).

In his monograph *The Public and its Problems* John Dewey (1927) views democracy as an ongoing, collective process of social improvement in which all actors and levels of society have to participate. He believes that democracy develops through involving actors in making decisions that affect them and not through imposition of solutions by powerful outsiders. Dewey sees democracy as a process of working through inconsistencies such as those involved in seeking organisational change and sustainability, not to a final resolution but towards an improved state of affairs. This argument is consistent with the critical action research methodology and Habermasian critical theory that underpins this study (see Chapters 3 and 5). Action research has its roots in Deweyan pragmatism (see Greenwood & Levin, 2007). Habermasian (1984, 1987, 1996) theories of communicative action and deliberative democracy also have their roots in Deweyan pragmatism (see Eriksen & Weigård, 2003).

Habermasian critical theory (1984, 1987, 1996) provides epistemological lenses for exploring organisational learning and sustainability (see Section 3.4). At the heart of Habermasian critical theory is the assumption that actors in an organisational context may enable social change through *communicative interactions*. Section 1.5.1 of this chapter clarifies how this theoretical concept is applied in this report. Chapter 3 (see Section 3.4) provides details on a Habermasian critical theory approach to enabling organisational learning and sustainability. I specifically discuss Habermasian (1984, 1987, 1996) theories of *communicative action* and *deliberative democracy* to provide an appropriate framework for developing the learning capabilities of participants to address sustainability issues. For Habermas, all processes of knowing are subject to critique, a process that comprises analysis and interactions mediated through communicative action and democratic deliberations. This argument is rooted within critical theory philosophy that I introduce in the next section to indicate the methodological perspectives for the study.

1.4.3 Critical tradition

This study is located within the critical tradition that is historically associated with the activities of the Frankfurt School. A critical tradition entails a commitment to socially transformative research in which ideological and power-related issues are addressed in society (Guba, 1990). The research has an explicit commitment to social justice and democracy that underpins sustainability change initiatives in organisations (see Chapter 7). Chapter 5 (see Section 5.2.1) outlines in more detail assumptions underlying critical theory philosophy. A key dimension of the research is an epistemological critique of the ways in which power is embedded and reinforced in social and socio-cultural interactions in organisations (see Section 5.2.2). I have drawn upon critical theory as both *school of thought* and process of critique for social change (see Section 5.2).

Basically, the study utilises philosophical assumptions of critical theory and action research to apply a critical action research methodology for exploring organisational learning and sustainability within a specific context. I regard critical action research as a participatory, democratic social learning process concerned with developing practical and diverse ways of knowing amongst participants in a community of practice (see Section 5.3). Chapter 5 provides more details on the critical action research methodology and Chapter 6 describes my research process. I employed critical action research as both a method of critical inquiry and epistemology of change in regard to organisational learning and sustainability. Critical action research rests on the following features and methodological principles (Somekh, 2006; Greenwood and Levin, 2007; see Section 5.3 for details):

- Integrating action, research and participation (see Chapters 7 and 8).
- Entailing collaborative inquiry *on* and *in* one's own organisation (see Chapter 6).
- Developing a context specific and critical understanding of enabling organisational learning and sustainability (see Chapters 7 and 8).
- Developing the learning capabilities of participants for addressing sustainability issues in their contexts (see Chapter 8).
- Establishing a collective vision of social change and achieving organisational learning and sustainability (see Section 7.3.1).

- Incorporating high levels of reflexivity in the research (see Section 5.5.1).
- Positioning inquiry within broader contextual influences (see Chapter 2).
- Embracing diversity and promoting different ways of knowing (see Section 9.4)

For me being critical entails undertaking a form of organisational analysis to identify contextual factors that pre-exist in an organisation which enable or constrain social change and the emergence of organisational learning and sustainability (see Chapter 7). In this research, the participants and I made attempts to act upon contextual factors that constrained learning capabilities to address sustainability issues at the NMK. The process was undertaken within three broad cycles of inquiry as presented in Chapter 6. This enabled a critical engagement for possibilities of improving organisational learning and sustainability practices at the NMK (see Chapter 8). I employed a number of research techniques that included: focus groups, workshops, document reviews and journaling to generate data (see Section 5.4). Generated data were analysed to identify themes on organisational learning and sustainability through manual coding (see Section 6.6). I induced the themes presented and discussed in this report from textual analyses, literature reviews and my own experiences on the research topic.

Exploring organisational learning and sustainability within Archerian social realism and Deweyan pragmatism as outlined above, requires a social learning theory that encompasses both issues of *being*, and issues of *knowing*. The next section introduces Lave and Wenger's (1991; see also Wenger, 1998) *communities of practice* approach as an appropriate analytical conceptual framework for exploring morphogenetic relationships through communicative interactions.

1.4.4 *Communities of practice approach*

This study focuses on the social interactive dimensions of situated learning to develop context specific understanding and ways of knowing organisational learning and sustainability in a Kenyan context (see Chapter 2). It utilises Lave and Wenger's (1991) *communities of practice* approach, as both unit of analysis and *social learning theory* for exploring morphogenetic relationships (see Section 1.5.4) through communicative interactions (see Section 1.5.1). The communities of practice approach is currently being

utilised as a conceptual framework to analyse and facilitate *ways of knowing* in a wide range of organisational contexts (Brown & Duguid, 1991; Roberts, 2006; Wenger *et al.*, 2002). It has become increasingly influential within the fields of business management (e.g. Elkjaer, 2003; Roberts, 2006) and environmental education (e.g. Hart, 2007; Lupele, 2007; Wals, 2007a). Exploring organisational learning and sustainability based on a social learning theory has made it possible for me to cover both issues of *being*, and issues of *knowing* (Elkjaer, 2003; see Chapter 4 for details).

According to Wenger *et al*. (2002, p. 98), communities of practice are "groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis". The research participants shared the concern of improving sustainability practices at the NMK. Wenger (2000) describes communities of practice as the basic building blocks of social learning processes in an organisation. People in an organisation can simultaneously be members of several communities of practice to signify the existence of multiple sites of learning and knowledge creation in a specific context. Drawing on Lave and Wenger's (1991, see also Wenger, 1998) earlier work, I introduce key characteristics of social learning processes in communities of practice (see Section 4.2.2; see also Altrichter, 2005) as follows:

- *Learning is situated*
  Learning and knowing have been viewed by Lave and Wenger (1991, p. 67) as "relations among people engaged in an activity in, with, and arising from the socially and culturally structured world". This research places emphasis on insights into social and socio-cultural interactions that arise from environmental education processes of acting on contextual factors that constrain social change (see Sections 6.4 and 9.2).
- *Learning occurs in the mode of legitimate peripheral participation*
  Such learning necessitates participation in enabling social change processes and the emergence of organisational learning and sustainability. For Lave and Wenger (1991, p. 29), "legitimate peripheral participation" is about a process by which new employees become part of a community of practice through the learning of knowledgeable skills. Learning in this research occurs within communicative

interactions that entail developing agential capabilities to address sustainability issues (see Sections 1.5.1, 4.2.2).

- *Learning means engaging in the social world*
  This means that learners are engaged both in the contexts of their learning and in the broader social world within which the contexts are produced (Hanks, 1991). I have positioned this critical action research study within the broader Kenyan contexts that influence agential learning capabilities to address sustainability issues at the NMK (see Sections 4.2.2 and 5.3.1; see also Chapter 2).

- *Learning occurs in socially structured situations*
  The social structure of organisational practice and existing power relations define possibilities for learning (Lave & Wenger, 1991). This study has a strong focus on exploring how morphogenetic relationships enable or constrain organisational learning and sustainability (see Sections 5.2.2, 7.2.1 and 7.4.2).

- *Learning is the formation of identity in communities of practice.*
  The achievement of organisational competences is connected with processes of identity development in the context of organisational learning and sustainability. Lave and Wenger (1991) regard learning competences and developing identities as part of the same process (see Section 4.2.2). A focus on reviewing basic assumptions and values underlying the NMK (see Sections 7.3 and 9.3) is aimed at enabling critical reconstruction of possibilities for identity development (see Chapter 8).

I discuss the above characteristics further in Chapter 4 when exploring social learning theory for organisational learning and sustainability (see Sections 4.2.2 and 4.3.3). For Wenger (1998) communities of practice are important places of negotiation, learning and identity. He identifies three dimensions of the relation by which practice is the source of coherence of a community as *mutual engagement*; *joint enterprise*; and a *shared repertoire* of communal resources (see Sections 4.2.2 and 8.6.1). The research group that I established at the NMK was akin to a community of practice (see Sections 6.3.2 and 9.5.1). It was defined by a common stock of ideas that gave it its identity and that of the NMK (see Section 8.6). The group was also defined by its participation in the Museum in Change Programme (see Section 7.4). Its mutual engagement in the heritage conservation activities at the NMK further bound the group members together as a community of practice. The

group, operated alongside other *communities of practice* that were also engaged in heritage conservation activities and the Museum in Change Programme.

Having introduced the major philosophical and theoretical frameworks of the study, I clarify in the next sections key theoretical concepts employed in this report.

1.5   Clarification of theoretical concepts

Several bodies of thought informed and shaped this study. In particular, the works of Margaret Archer (see Section 3.3) and Jürgen Habermas (see Section 3.4) were central to exploring organisational learning and sustainability as presented in this report. Some readers will find it unconventional for me to draw upon two major social theories with different philosophical tenets in one study. However, I hold with Child (1997), the view that congruent perspectives from different and competing social theories can be integrated to bridge their incompatibilities. Moreover, richer and deeper insights are provided than those obtainable through using a single theory. For me, the integrative potential derives from the fact that both Archer (2003) and Habermas (1987, 1996) acknowledge the capabilities of actors to choose and creatively use their reflexive and deliberative powers in enabling social change (see Section 3.2.3). I have employed a number of theoretical concepts to strengthen the use of the Archerian and Habermasian theoretical frameworks as clarified in the next sections.

1.5.1 Communicative interactions

The concept of *communicative interactions* as applied here refers to my environmental education processes to develop the learning capabilities and reflexivity of participants to address sustainability issues in a community practice. As environmental education processes, communicative interactions at the NMK emphasise context, reflexivity, criticality and open processes of learning and organisational change (Lotz-Sisitka, 2004; see Section 2.4.3). I derive key features of communicative interactions from Habermasian critical theory (see Section 3.4) and critical action research (see Chapter 5). Fundamental to Habermasian critical theory is the argument that actors, through language, are part of a mutual process of understanding aimed at enabling organisational learning and

sustainability. During communicative interactions, research goals are jointly decided upon through a process of communication that recognises democratic principles and respect for all participants. However, I use the concept of communicative interactions beyond the Habermasian linguistic framework to also consider diversity and pluralism in organisations (see Section 5.2.3).

Four interrelated dynamics are involved in communicative interactions that took place within the research group as a community of practice. They are the dynamics of collective social action and innovation, democratic deliberations, critical reflections and systemic thinking (see Section 4.4 and 9.4). I have analysed communicative interactions to reveal structural and cultural factors that constrained participant learning capabilities to address sustainability issues. These factors shaped identity formation at the NMK as revealed during social and socio-cultural interactions that were aimed at enabling social change and the emergence of organisational learning and sustainability (see Chapters 7 and 8). As a basis for pedagogical practice, communicative interactions can be used to link educative interventions to the structural and cultural constraints that pre-exist in an organisation (Forester, 1983). Although Habermas rarely addresses pedagogical issues, they are implied by his general understanding of reflexive learning and the dialogical basis of communicative action and democratic deliberation (Morrow & Torres, 2002; see also Section 3.4). Many critical environmental (e.g. Fien, 1993a, 1993b; Fien & Hillcoat, 1996; Huckle, 1993; Janse van Rensburg & Lotz-Sisitka, 2000; see also Section 4.4.2) and adult educators (e.g. Collins, 1998; Mezirow, 1991) have drawn on Habermasian critical theory for their theory and practice.

To further ground *communicative interactions* as a basis for social learning processes, this study also draws upon ideas from critical pedagogy (see Giroux, 1988; Kincheloe, 2004) and critical action research (see Carr & Kemmis, 1986; Greenwood & Levin, 2007; see also Section 5.3). I advance the argument that actors in an organisational setting can enable organisational learning and sustainability through critical and cyclical environmental education processes. Viewed as environmental education processes, communicative interactions need to emphasise context, reflexivity, criticality and open processes of learning and social change in the context of sustainability (Lotz-Sisitka, 2004).

1.5.2   Critical pedagogy

I apply the concept of pedagogy in an expanded manner as a form of political, moral and social production that occurs beyond schooling (Giroux, 1988, 2003; Giroux & Simon, 1989). Both critical pedagogy and critical action research processes are based on critical theory philosophical assumptions that I examine in Chapter 5 (see Section 5.2). Critical pedagogy and critical action research educative processes (communicative interactions) are grounded in a collective learning vision of justice and equality, constructed on the belief that learning is essentially political, committed to lessening human suffering and enacted through the use of generative themes to enable actors to understand the complexity of their context (Kincheloe, 2004).

Proponents of critical pedagogy such as Apple (2001), Giroux (1988) and Kincheloe (2004) have argued that educational practices are politically contested spaces. In doing pedagogy in organisations such as the NMK, it is important to name and problematise the social relations, experiences and ideologies that are active (Giroux, 1981, 2006). Critical educators and action researchers are expected to expose the oppressive workings of power in society and offer democratic, pluralistic and more power-sharing alternatives in their place. This view is supported by Apple (2001, p. 218) when he argues

> Education both must hold our dominant institutions in education and the larger society up to rigorous questioning and at the same time this questioning must deeply involve those who benefit least from the ways these institutions now function.

By grounding communicative interactions in a political and social vision of learning, critical educators and researchers may enable social change and the emergence of organisational learning and sustainability in specific contexts. Communicative interactions need to emphasise forms of knowledge that enable a critical understanding of morphogenetic relationships in organisations. This requires one to take into consideration the social and socio-cultural contexts of learning contexts. Communicative interactions as a basis for social learning processes are thus useful in the generation of knowledge, the construction of identity and the learning of relations, ideas and values that support sustainability principles (see Sections 3.3; 4.2.2; 7.5 and 8.4).

1.5.3 Democratic deliberations

Related to *communicative interactions* is the theoretical concept of democratic deliberations that is derived from Habermasian (1996) theory of *deliberative democracy* (see Section 3.4.3 for details). Following Habermas, democratic deliberations are oriented towards mutual understanding in which actors are motivated to solve sustainability issues by argument. I view democratic deliberations as both a special form of discussion, and as joint problem solving within a community of practice (Wagenaar, 2002). Seeing deliberation as a joint problem-solving activity places organisational learning and sustainability in a complex reality that involves morphogenetic relationships. Knowing such reality is a social learning outcome in which participants gain insights into structural and cultural constraints to social change and the emergence of organisational learning and sustainability (see Section 4.2.2; see Chapter 8).

During the research process, I created conditions necessary for democratic deliberations (see Section 6.3.3) to develop participant learning capabilities and reflexivity to address sustainability issues (see Section 9.4.2). Such conditions allowed for argument, rhetoric, humour, emotion, testimony, storytelling and even gossip during our communicative interactions (Dryzek, 2000; see Sections 3.4.3 and 9.4.2). Enhancing democratic deliberations within a community of practice is a key element of communicative interactions at the NMK.

1.5.4 Morphogenetic relationships

Following Archerian *social realism* that grounds this research ontologically, I consider *morphogenetic relationships* as dynamic agential, structural and cultural interactions that tend to enable change or maintain the status quo in an organisation (see Section 3.3). Archer derives the principle of morphogenesis from Walter Buckley's (1967) systems theory that explores dynamic relationships of people in an organisation (see Sections 3.3.1 and 4.4.4). According to Buckley (1967), morphogenesis refers to those processes that tend to change a system's given form or state. Conversely, he uses the term *morphostasis* to refer to those processes that tend to maintain the status quo in a system. Exploring organisational learning and sustainability as morphogenetic relationships followed three

phases (Archer, 1995; see Sections 3.3.1 and 9.2). Firstly, I identified structural and cultural factors that pre-existed at the NMK to constrain learning capabilities to address sustainability issues (see Sections 7.2 and 9.2.1). Secondly, I explored the consequences of addressing some of these factors through communicative interactions (see Section 9.2.2 and Chapter 8). Finally, I delineated the organisational learning changes that emerged from my environmental education processes and the Museum in Change Programme (see Sections 9.2.3 and Chapter 8). These phases correspond to the three broad action research cycles of inquiry that I present in Chapter 6 (see Sections 6.3, 6.4 and 6.5).

Underpinning morphogenetic relationships is the argument that agency, structure and culture occur as distinct entities entangled in social reality (Willmott, 2000). Disentangling their emergent powers and properties through communicative interactions is fundamental to enabling organisational learning and sustainability in a specific context. This study views agency as the creative role of people and the capability to choose to use their emergent powers of *reflexivity* to address sustainability issues (Archer, 2003; see Section 3.2.3). Structure is understood as a network of internal *social relations* in an organisation that condition communicative interactions by supplying actors with reasons for pursuing change or stability in the context of sustainability (Archer, 1995; see Section 3.2.4). Such relations are defined by the resources, positions and responsibilities that actors have in an organisation. I conceptualise culture as the relationships between *ideas* and their role in conditioning agential capabilities to enable change and sustainability in an organisation (Archer, 1985; see Section 3.2.5).

1.5.5 Organisational learning and sustainability

In spite of the proliferation of literature on *organisational learning* (e.g. Friedman *et al.*, 2005; Palmer & Hardy, 2000; Senge, 1990) and *sustainability* (e.g. Blewitt, 2004b; Eichler, 1999; Orr, 2002; Tilbury & Cooke, 2005), these concepts remain difficult to define or envision (see Section 4.3.1). They can be regarded as essentially contested concepts given that they predictably involve endless disputes about their proper uses on the part of their users (Lukes, 2005). However, it is undesirable to look for universal descriptions of organisational learning and sustainability as concepts. This study utilises the concept of *communities of practice* (see Sections 1.4.4 and 4.2.2) to argue for a social learning theory

for organisational learning and sustainability (see Chapter 4). It views both sustainability and organisational learning as ongoing interactive and collaborative social learning processes that seek agential, structural and cultural changes within communities of practice (see Sections 4.2.2 and 4.3.3). The research group that I formed for the purpose of this study constituted a community of practice at the NMK (see Section 6.3.2). Social learning theory is useful in addressing the conceptual confusion of associating organisational learning and sustainability with individual learning theory (Elkjaer, 2003). For this study, social learning theory considers the significance of relationships, collaborative action, democratic deliberations and systemic thinking in fostering social change and the emergence of organisational learning and sustainability.

1.5.6 Systems thinking

Systems thinking emerged in the 20th century through a critique of reductionism[6] (Flood, 2001). It has its roots in general systems theory that focuses on relationship and structure, rather than parts (Bertalanffy, 1956; Buckley, 1967). The underlying assumption is that we cannot understand the complexity of social systems by studying their parts (Fleener, 2005). Systems theory rejects the mechanistic and reductionist thinking of modern science and emphasises holism, emergence and patterns of organisation (Flood, 2001). Bertalanffy (1956) was among the first to explore general systems theory as an approach to understanding complex phenomena as they evolve (Fleener, 2005; Flood, 2001). Applied to organisational learning and sustainability, systems thinking views organisations as complex systems composed of interrelated parts, most usefully studied as an emergent whole (see Section 3.2.2). In an organisation such as the NMK, the parts comprise people and their socio-cultural interactions as reported in Chapters 7 and 9. A systems-thinking perspective is important for understanding social changes that result in such complex socio-cultural interactions (Dyball *et al.,* 2007). Enabling organisational learning and sustainability as reported in Chapter 8, focused on institutionalising systemic structural and cultural changes.

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[6] Reductionism generates knowledge and understanding of phenomena such as sustainability issues by breaking them down into parts and then studying these simple elements in terms of cause and effect (Flood, 2001).

This research makes a subtle distinction between *systems thinking* and *systemic thinking* that are derivatives of general systems theory (Bertalanffy, 1956; Buckley, 1967). According to Capra (1996, p. 17), the holistic perspective to understanding social change in complex situations has become known as "*systemic* and the way of thinking it implies *systems thinking*". For me, systems thinking and systemic thinking respectively relate to ontological and epistemological perspectives introduced in this chapter. Flood's (2001) categorisation that follows is used to further clarify this distinction.

Flood (2001) categorises systems thinking in social sciences into two schools of thought. The first is *systems thinking* that advocates thinking about real social systems as if they exist in the world. Archerian morphogenetic approach to organisational analysis as discussed in Chapter 3 (see Section 3.3), reflects this school of thought. Emergence and interrelatedness are the fundamental ideas of systems thinking in this school of thought (see Section1.5.1 for concepts related to critical realism). The research employs these concepts to explain morphogenetic and morphostatic relationships that pre-existed at the NMK to influence social change and sustainability (see Section 9.2). I have understood the NMK to be an emergent property of an interrelated whole (see Sections 3.2.2 and 9.3). The second school of thought is *systemic thinking*, which assumes that the social construction of the world is only systemic (Flood, 2001). Systemic thinking refers to a mode of thinking that keeps actors in touch with the wholeness of their existence in organisations (*ibid*.). Fostering systemic thinking in participants is one of the key components of *communicative interactions* as introduced in Section 1.5.1.

1.6   Contributions of the study

This study has deepened an understanding of ontological, epistemological, methodological and pedagogical implications for exploring organisational learning and sustainability at the NMK (see Section 10.3). It generates useful insights into the complex reality of enabling organisational learning and sustainability at the organisation. It provides empirical evidence on different ways of knowing and contextual factors that influence agential learning capabilities to address sustainability issues. The research developed the learning capabilities of participants to address sustainability issues collectively and collaboratively.

This has contributed to improved organisational learning and sustainability practices at the NMK. Furthermore, the study adds to an emerging body of literature on organisational learning and sustainability from an environmental education standpoint (see Wals, 2007b). It is my attempt to improve the *praxis*, reflective practice informed by theory, by exploring organisational learning and sustainability at the NMK using critical action research methodology.

1.7   Outline of the thesis

Organisational learning and sustainability, as reported in this thesis are organised in five parts and structured in ten chapters. Each part contains two chapters. Part 1 presents the introduction and context of the study. It contains this introductory chapter and Chapter 2. Chapter 2 provides an orientation to how the broader Kenyan context, the NMK organisational context and the field of environmental education have influenced my critical action research exploration into organisational learning and sustainability.

Part 2 presents theoretical foundations of the study in Chapters 3 and 4. It provides *frames* and *lenses* through which organisational learning and sustainability has been explored and understood. Chapter 3 discusses the implications of undertaking the research within Archerian morphogenetic approach and Habermasian critical theory frameworks. It provides the ontological and epistemological lenses for exploring organisational learning and sustainability. Chapter 4 explores both organisational learning and sustainability as social learning processes in communities of practice. It applies a social learning theory for organisational learning and sustainability which encompasses both morphogenetic relationships (*being and becoming*) and communicative interactions (*ways of knowing*).

Part 3 illuminates the research methodology and processes in Chapters 5 and 6 respectively. In Chapter 5, I present the critical theory philosophical framework within which I designed and conducted the research. The chapter discusses critical action research as both method of inquiry and epistemology of change. It presents the research techniques that I employed to generate data. Issues related to quality and validity as in critical action research and the design of this study are addressed. Chapter 6 describes the research design and processes of

exploring organisational learning and sustainability within a critical action research methodology. It presents three broad cycles of inquiry: identifying contextual issues, acting on these issues to enable social change and sustainability and institutionalising social change and the emergence of sustainability at the NMK. The chapter examines how I analysed, managed and interpreted data. It also addresses ethical issues related to undertaking critical action research in my organisation.

Part 4 presents research findings on contextual issues and social learning outcomes in Chapters 7 and 8. Chapter 7 reports on findings from the first broad cycle of inquiry that identified contextual factors which *conditioned* participant learning capabilities and reflexivity to address sustainability issues. It explores possibilities for social change through envisioning a sustainable NMK. Chapter 8 presents findings from the second and third cycles of inquiry on deliberations and possibilities for enabling organisational learning and sustainability. It provides insights into the possibilities for institutionalising social change processes at the NMK.

Part 5 discusses findings from the study with reference to the research aims. Chapter 9 discusses how the research has deepened an understanding of ontological, epistemological and pedagogical implications of exploring organisational learning and sustainability within a critical action research perspective. Chapter 10 discusses and reflects on the research process and findings of the study. It reflects on the entire study at two levels: the *core* action research project and the *thesis* action research project as introduced earlier in Section 1.3 (see also Section 6.2.3). The chapter summarises implications for the study and suggests some directions for further organisational changes at the NMK and research in environmental education.

Appendices 1 – 10 provide additional information on the research design, processes and findings on exploring organisational learning and sustainability at the NMK.

1.8   Summary

This introductory chapter has sketched the terrain that I traversed with a group of fellow NMK employees to enable organisational change. It has located the study within critical tradition that requires a commitment to socially transformative research. The chapter has positioned me as an *insider* critical action researcher and educator working collaboratively with a research team akin to a community of practice. Framing the study within the field of environmental education and critical action research has located it within my professional and academic historical background. The chapter states the research aims and points out how they are addressed within philosophical assumptions of Archerian social realism, Deweyan pragmatism and critical theory. The chapter introduces three major theoretical frameworks that offer lenses for exploring organisational learning and sustainability as sought in this study. These theoretical frameworks are Archerian morphogenetic approach, Habermasian critical theory and Lave and Wenger's communities of practice approach. I have clarified theoretical concepts related to these frameworks to indicate how they are used in subsequent chapters.

Social learning processes are influenced by both organisational contexts and the broader social world within which the contexts are produced. The next chapter examines how the broader Kenyan context, the NMK organisational context and the field of environmental education have influenced organisational learning and sustainability as explored in this study.

Chapter 2 Shaping Contextual Influences

2.1   Introduction

This critical action research inquiry is particularly interested in the social learning contexts of learners and in the broader social world within which these contexts are produced (Hanks, 1991). This chapter presents contextual influences that shape the exploration of the emergence of organisational learning and sustainability at the NMK. Three context areas of the study are discussed: the broader Kenyan context, the NMK organisational context and the environmental education epistemological context. I view the Kenyan context systemically as consisting of historically constituted interactions between the biophysical, political, social and economic dimensions of the environment. Such interactions are known to influence organisational change initiatives in Kenyan corporations including the NMK (NMK, 2005). The chapter therefore, provides a framework for understanding the contextual issues reported in Chapters 7 and 8 on organisational learning and sustainability.

The first section of the chapter discusses the biophysical, political, social and economic dimensions of the Kenyan environment to point out sustainability issues relevant to the study. The issues include high levels of poverty, poor governance, ethnicity, corruption, HIV/AIDS and environmental degradation. Emerging responses to these issues are shared. In the second section, the chapter presents the NMK organisational context and its influences on the study. It illuminates the functions of the NMK and its role in fostering a sustainable society. Finally, the chapter provides an overview of the field of environmental education within which the study is located. It highlights socially critical and reflexive approaches to environmental education for exploring organisational learning and sustainability as processes of social change.

2.2   The Kenyan context

This study is context bound and seeks to address sustainability issues holistically in order to generate a systemic understanding of the NMK organisational setting (Greenwood and Levin, 2007; see Sections 5.3.1 and 7.2). One of its key features is to generate context specific and critical understanding of agential, structural and cultural constraints to organisational learning and sustainability (Somekh, 2006; see Section 5.3.1). I am interested in context for a number of reasons (see Janse van Rensburg & Lotz-Sisitka, 2000). Firstly, the sustainability issues explored at the NMK manifest differently in different contexts. Secondly, the issues consist of various inter-related variables that differ from one place to another. Finally, few universal solutions to sustainability issues exist and have to be addressed in context.

To provide a critical understanding of the broader Kenyan contextual influences, I view the country as a complex social system composed of interrelated parts that need to be explored as an emergent whole (see Section 1.5.6). These parts are conceptualised here as historically constituted interactions of the biophysical, political, social and economic dimensions of the environment (Janse van Rensburg, 1999; O'Donoghue, 1988). This part of the chapter examines the interactions within a framework of a "wheel of interacting global concerns" (Janse van Rensburg, 1999, p. 16; see Figure 2.1)

Global concerns of conservation, democracy, peace and development as shown in Figure 2.1, respectively correspond to biophysical, political, social and economic dimensions of the environment. This research focuses on global concerns of democracy and social justice that are linked to political dimensions of an organisation. However, such political concerns of sustainability are interrelated with those of the social, economic and biophysical, as depicted in Figure 2.1. In Chapter 4 I provide details on the meaning and theoretical perspectives of sustainability (see Section 4.3).

Figure 2.1   A wheel of interacting global concerns
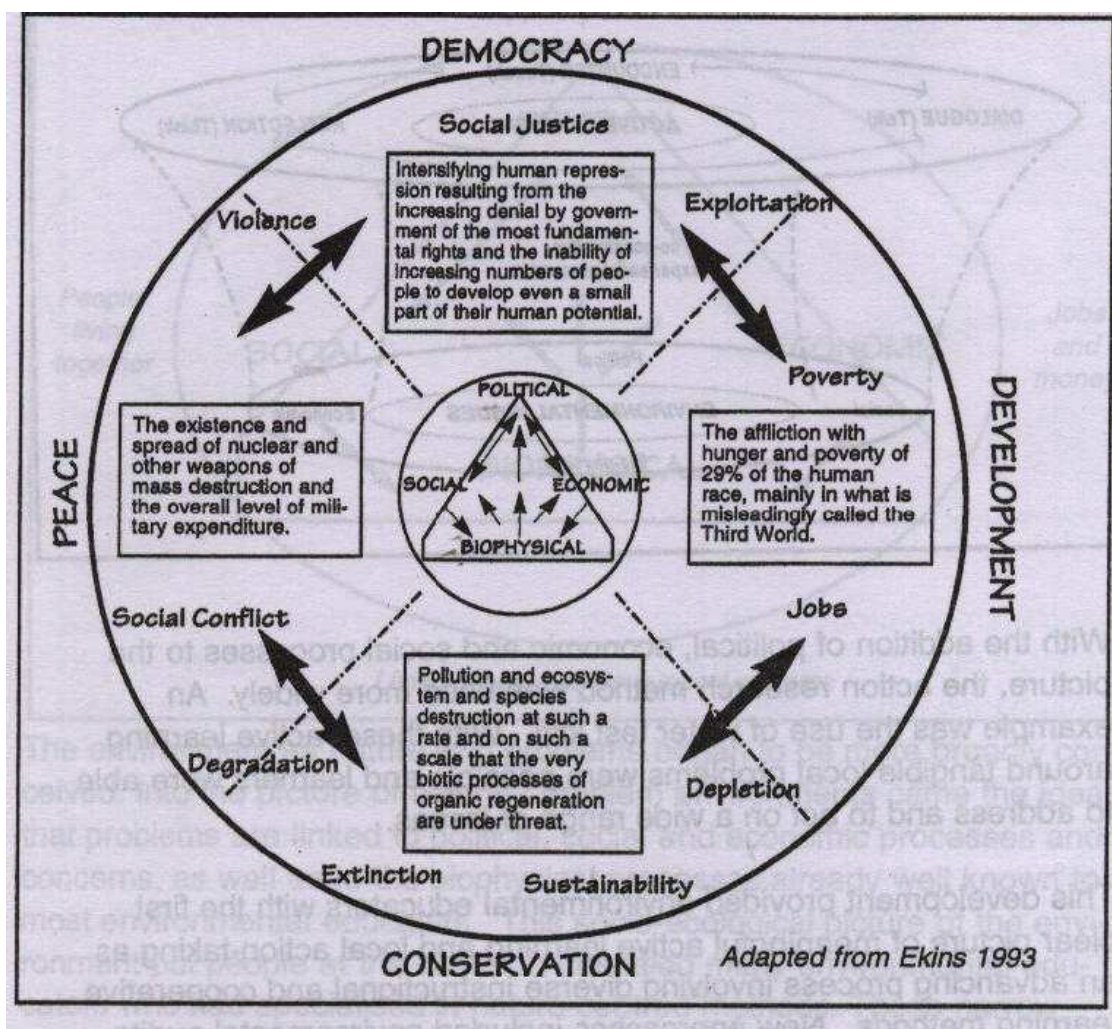
Source: Janse van Rensburg (1999, p. 16)

The next sections discuss the biophysical, political, social and economic dimensions of Kenya to illuminate key sustainability issues that characterise the country's environmental crisis. Emerging responses to the issues are outlined. Firstly, I examine the biophysical dimensions of the Kenyan environment.

2.2.1 Biophysical dimensions: issues and responses

Kenya has a surface area of 587 000 square kilometres of which 576 000 square kilometres are land surface and 11 000 square kilometres are covered by water (NEMA , 2003). It is located within eastern Africa and lies between Lake Victoria and the coastal waters of the

Indian Ocean. The country is almost bisected horizontally by the Equator and rises from a low coastal plain on the Indian Ocean in a series of mountain ridges and plateaus which stand above 30 000 metres in the centre of the country. This makes the country prone to soil erosion and flooding. The country's rainfall distribution ranges from 200mm in arid lands up to 2000mm. About 88 percent of the country lies in the arid and semi-arid areas. The arid and semi-arid areas are mainly found in the northern and eastern regions. These areas experience environmental challenges caused by shifting climatic patterns, water shortages, over-grazing and desertification. About 10 million people who reside in the arid and semi-arid areas suffer from widespread and acute poverty (UNDP, 2006).

The high potential areas, which are characterised by adequate rainfall and mild temperatures, occur in the central, south western, parts of the Rift Valley, plateau regions and the Nairobi area. Most of the Kenyan population is concentrated around these areas. Key resources for livelihoods in the high potential areas include fuel wood, water, access to productive land and healthy ecosystems (NEMA, 2004). All these resources are under threat from high population pressure that has led to deforestation, pollution and soil erosion. Kenya consists of seven ecological zones with varying climatic conditions that determine their biodiversity, carrying capacities and land use appropriateness. The Kenyan grasslands, forests, wetlands and arid lands ecosystems are rich in biodiversity. However, the rate of biodiversity loss is now on the increase. The *National Environment Action Plan* (Government of Kenya, 1994) and the 2003 *State of the Environment Report* (NEMA, 2003) ascertain that over-exploitation, inappropriate policies, poor management practices and limited choices are the leading causes of biophysical environmental degradation in the country. A strong relationship exists between biophysical environmental degradation and increasing poverty levels in the country (Government of Kenya, 2000; see Section 2.2.3).

Since its independence, Kenya has been responding to sustainability issues related to environmental degradation through environmental education processes (Government of Kenya, 1999; NEMA, 2007; see Atiti, 2003b for details). The government, civil society organisations and the private sector are involved in the conservation of the biophysical environment through diverse environmental education programmes that focus on advocacy and public awareness, resource material development, research and innovations, capacity

development and collaborative networks (Atiti, 2003b; NEMA, 2007). Through the publication of reports on the state of the environment, the National Environment Management Authority (NEMA) is increasing awareness about the interrelationships between human development activities and sustainable living (e.g., NEMA, 2003, 2004). Like other countries of the world, Kenya has ratified a number of international agreements aimed at combating environmental degradation. For example, in 1997 Kenya ratified the United Nations Convention to Combat Desertification that calls on governments to focus on raising awareness, education and training (UNDP, 2006). Kenya has also ratified the following international conventions (NEMA, 2007):

- *Agenda 21: Programme of Action for Sustainable Development*
  This is a non-binding programme of action that was adopted by more than 178 Governments including Kenya, at the *Earth Summit* in 1992 (UNESCO, 1992). It is based on the premise that all countries can protect the environment while simultaneously experiencing growth (see Section 2.4.1).

- *Convention on Biological Diversity (CBD)*
  CBD aims to conserve and promote the sustainable use of the earth's biological diversity. The NMK houses the national CBD office in the country.

- *The United Nations Framework Convention on Climate Change*
  This is an international agreement that was developed in 1992 in response to the influences of human activities on global climate.

- *The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)*
  CITES was set up to control the international trade in endangered species of plants and animals. Through its research programmes, the NMK plays an advisory role in improving the implementation and awareness of CITES in the country.

- *The Convention on Wetlands (Ramsar Convention)*
  This is an international treaty that provides a framework for national and international cooperation for the conservation and wise use of wetlands and their resources. The NMK undertakes research on the conservation of Kenyan wetlands and raises public awareness about their importance through education programmes (see also Section 2.3.3).

- *Convention concerning the Protection of World Cultural and Natural Heritage (World Heritage Convention)*

  This convention defines the kind of natural and cultural sites that can be considered for inscription on the World Heritage List. Kenya has three sites listed on the World Heritage List. These are the Koobi Fora Paleontological Site, the pristine Lamu Island and Mount Kenya Forest Reserve. The NMK manages these sites in collaboration with other organisations on behalf of the Government.

In addition, Kenya is also committed to implementing the United Nations Decade of Education for Sustainable Development (DESD). DESD envisions a world where all people have the opportunity to benefit from quality education required for social change and sustainability (UNESCO, 2004). Through the National Environmental Management Authority (NEMA), the country recently developed a strategy for implementing Education for Sustainable Development (ESD) to fulfil the DESD vision (NEMA, 2007). The ESD strategy provides a framework for addressing the Kenyan environmental crisis towards achieving the following strategic objectives (*ibid.* p.20):

- To enhance the role of education and learning for equitable, efficient and sustainable utilisation of the country's resources
- To promote quality education through diverse learning and public awareness for improved quality of life and productive livelihoods
- To promote teaching and learning that inculcates appropriate values, behaviour and lifestyles for good governance and sustainability

The mission of the Kenya ESD strategy is "to provide an enabling environment and capacity for all sectors and stakeholders to effectively contribute towards the achievement of sustainable development" (NEMA, 2007, p. 20). Through its public programmes, the NMK contributes to these objectives as part of its mandate of facilitating the understanding and interpretation of *natural and cultural heritage*[7] within the context of sustainability

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[7] In the context of the NMK, natural heritage refers to natural features, geological formations of significance, delineated habitats of threatened biodiversity and areas of religious significance such as the Kaya Forests (Government of Kenya, 2006). On the other hand, cultural heritage means monuments, architectural works, works of humanity that are of archaeological or palaeontologic interest and groups of buildings (*ibid*).

(NMK, 2004; see Section 2.3.3). This study sought to strengthen the learning capacity of the organisation to address sustainability issues such as those related to the biophysical dimensions highlighted here. However, addressing these issues requires a critical and holistic consideration of all dimensions of the Kenyan environment.

The next section presents issues related to political dimensions and their influence on organisational learning and sustainability in organisations such as the NMK.

2.2.2 Political dimensions: issues and responses

Kenya, as a former British colony became independent on 12 December 1963 and a republic in 1964 as a de facto one-party state under the Kenya African National Union (KANU). In June 1982, the National Assembly amended the constitution, making Kenya de jure a one-party state and operation of opposition parties illegal. Multiparty democracy was reintroduced in December 1991 after the parliament repealed the one-party constitution act. For the entire post-independence period, Kenyan political systems have strongly been influenced by the personal rule of the first three presidents, Mzee Jomo Kenyatta (deceased), Daniel arap Moi and the current president Mwai Kibaki. Until recently, Kenya had been regarded as an island of political stability in an otherwise turbulent region. This image was shattered following the recent disputed December 2007 presidential[8] polls which plunged the country into one of its worst periods of ethnic violence and political instability.

Kenya is characterised by a patronage system and ethnically-based politics (Government of Kenya, 2003; Hanmer *et al.*, 2003). Since independence the distribution of national resources has routinely been skewed to favour those with political power (UNDP, 2006). In spite of the introduction of multiparty politics, Kenya is yet to establish strong institutions of democracy (Hanmer *et al.*, 2003). The country's political landscape features ethnic politics where politicians and elites exploit ethnicity for their own interests. Political power is understood to benefit the ethnic community from which the president or leader comes. Those without political power miss out on national resource distribution and participation

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[8] Although the Kenyan people voted overwhelmingly for change in parliamentary polls, the tallying process for the presidential poll was flawed and marred with irregularities that saw the incumbent retain the presidency. This sparked violent protests and ethnic fighting in which nearly 1000 Kenyans died and more than 350 000 became displaced (Bii & Mwajefa, 2008).

in decision-making processes. This creates disillusionment and hence the stiff competition for national leadership as witnessed in the December 2007 parliamentary and presidential polls. This research critically analyses power relations at the NMK not only within its boundaries but also within the boundaries of the Kenyan political context as highlighted here (see Section 5.2.2 and 7.4.2).

Other major political challenges facing Kenya are combating entrenched corruption and the enactment of a new constitution. Although the country established the Kenya Anti-Corruption Authority (KACA) in 2003 to fight deeply rooted corruption, little has been done in fighting grand corruption in major government institutions (UNDP, 2006). According to Dolan (2008), the current Kenyan constitution is designed to facilitate a one-party or single ethnic-community dictatorship. It consolidates too much executive power in the hands of the president. Despite the reforms of the early 1990s, the constitution[9] remains the focus of political discontent with the opposition arguing that the centralisation of power weakens the multiparty system. I agree with Kisero (2007), a columnist with *The East African* magazine when he writes:

> Constitutional reform and introducing systems that promote inclusion and power sharing are clearly part of the solution [to the current political instability]. Reducing the powers of the president by halting his control over patronage of resources is another. But even more important, and at a personal level, we will need to deal with entrenched mindsets. Attitudes and states of mind of the people will have to change. (http://www.nationmedia.com/eastafrican/current/News/news14010810.htm, 15/01/08)

This research reviews assumptions and values underlying the NMK as part of dealing with entrenched mindsets within an organisational setting (see Sections 1.3 and 7.3). It promotes democratic deliberations as an educative strategy for changing minds and opinions in the context of achieving sustainability (see Sections 3.4.3 and 4.4.2). The research focuses on issues of power relations, social change and development, and explores oppressive

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[9] In May 2001, Parliament enacted two bills to start the process for a comprehensive review of the constitution. The Constitution of Kenya Review Commission (CKRC) established through an act of Parliament facilitated the process. However, the Draft Constitution (popularly known as the Bomas Draft) that emerged from a people-driven process was hijacked by the political elite and manipulated to suit their interests. When the manipulated draft was put to a referendum in November 2005, it was resoundingly rejected by the Kenyan people.

workings of power in organisations (Greenwood & Levin, 2007; see Sections 5.2.2, 7.2.1 and 7.4.2).

Political freedom, participation and achieving sustainability have goals that are mutually reinforcing (UNDP, 2003; UNESCO, 2004). They constitute important pillars for good governance without which a sustainable society cannot be achieved. Democratic pluralism provides a means through which these goals may be achieved (UNDP, 2003; see Sections 1.4.2, 3.4.3 and 5.3.2 for details on democracy). It creates opportunities through which citizenry can participate in making decisions on sustainable development. According to the 2006 UNDP *Human Development Report* on Kenya (UNDP, 2006, pp. 28-29):

> Effective participation by the citizenry demands that the state guarantees the right to access to information; freedom of association of citizens and civil society; freedom of movement; freedom of the press; right to participate in political processes without discrimination; equal and equitable representation of the most vulnerable groups including the minorities, women, children and persons with disabilities in all political and decisions making processes.

Achieving a sustainable Kenya is dependent upon the democratic management and equitable distribution of resources, and an efficient public sector. The Kenyan public sector is still characterised by top-down governance systems that embody enormous bureaucracy and slow decision-making processes (UNDP, 2006). This study explores issues related to leadership and participation in decision-making processes to improve governance systems at the NMK (see Section 8.3). An efficient and effective public sector[10] of a country fosters, through its political leadership, an enabling environment for achieving a sustainable society (Rugumyamheto, 1998). A myriad of issues are associated with the poor governance systems in the Kenyan civil service and state corporations such as the NMK. They include: very high levels of government employment especially of unskilled personnel, low and inequitable compensation levels for the employees, non-transparent and patronising base for appointments and promotions, ineffective training programmes, emphasis on

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[10] According to Rugumyamheto (1998), the public sector is the mechanism that governments such as Kenya rely on to design, formulate and implement policies, strategies and programs, and to discharge all routine government functions. Good governance systems in a country are therefore synonymous with an efficient and effective public sector.

bureaucratic procedures and practices, excessively centralised decision making, low budgetary allocations to operations and a generally poor work environment (Rugumyamheto, 1998; UNDP, 2006). This research views such issues as structural and cultural constraints to agential learning capabilities to address sustainability issues in a specific context (see Sections 3.3 and 8.4.1). In Kenya, such constraints slow down delivery of government services to the public thereby negating sustainability change initiatives in organisations such as the NMK.

According to Benn and Dunphy (2007), traditional models of governance that are preoccupied with ensuring the control of delegated power are known to limit the capability of governments and organisations to address sustainability issues. *De-bureaucratisation* of government services and decentralisation of decision-making processes that underpin the Kenya Civil Service Reform Programme (CSRP), that I discuss later are central to achieving sustainability (Nzioka, 1998). Before discussing the CSRP, I need to acknowledge here that the first attempt by the Kenyan Government to decentralise decision-making processes was in 1983 through the District Focus for Rural Development (DFRD) strategy (IPAR, 2005). This strategy sought to decentralise decision making and implementation to the country's districts. The Bomas Draft Constitution recommends a major devolution of authority to the regions, districts and lower levels where the majority of Kenyans live.

According to Nzioka (1998), debureaucratisation and decentralisation of government services require a culture that is quality and results oriented. This calls for improving governance systems at both government and corporation levels to achieve a sustainable society (Benn & Dunphy, 2007; Doppelt, 2003). Such systems must have the capacity to respond to differences in power relations and to enable inclusive decision making processes as sought in this *socially transformative research* (Guba, 1990). To respond to sustainability issues associated with poor governance systems in its public sector, the Government started the Kenya Civil Service Reform Programme in 1993 (Nzioka, 1998). The Programme was conceptualised with the aim of creating a public sector that is efficient, productive and results oriented. Five broad components underpin the programme (*ibid*.):

1. *Streamlining of organisational structures*

   Reforms under this component aim for more streamlined organisational structures in the public sector to ensure clear hierarchy and more accurate job descriptions (see Section 8.3.3).

2. *Establishment of appropriate staffing levels*

   This involves down-sizing the public sector to achieve appropriate staffing levels for all cadres of government employees (see Section 8.4).

3. *Improvement of pay and benefits*

   This component focuses on achieving compensation levels to attract and retain professional and managerial talent within the government sector.

4. *Personnel management and training*

   Reform initiatives within this component include capacity building, rationalisation of personnel management agencies, improving disciplinary systems and promotion. This study addresses sustainability issues related to staff motivation and training at the NMK (see Section 8.4).

5. *Financial and performance management*

   This component addresses issues such as those of transparency and accountability in financial management (see Section 8.5). Other issues include institutionalisation of control systems, management of the national budget and use of performance evaluation. To date performance management systems have been introduced in all government ministries and state corporations such as the NMK, to improve productivity by maximising available resources (see Section 8.4.3).

The components of the Museum in Change Programme which this research investigates to generate insights into organisational learning and sustainability, are harmonious with the above broad areas of Kenya Civil Service Reform Programme (see Sections 1.3 and 2.3.2). The Museum in Change Programme seeks to improve corporate governance systems at the NMK (see Section 8.3). According to Gatamah (2004), corporate governance largely focuses on the leadership of corporate entities in which the power *of* and power *over* corporation is vested. He associates good corporate governance with a number of qualities of leadership that I find relevant for enabling sustainability at the NMK (see Doppelt, 2003;

Fullan, 2005; see also Section 4.3.3). Good corporate governance seeks to promote leadership for efficiency and effectiveness as sought by the Civil Service Reform Programme and Museum in Change initiatives (Gatamah, 2004). It looks for leadership that is honest, trustworthy and with integrity, such that it can be trusted with enabling sustainability. Good governance asks for leadership with responsibility and focused intelligence. Such leadership is responsible to the needs of the organisation and community. Furthermore, corporate leadership seeks to enhance leadership that is transparent and accountable (see Section 8.3.2). Gatamah (2004, p. 139) argues that good corporate governance is "a fundamental building block of a just and economically prosperous society". This confirms the inter-relatedness between political and socio-economic factors within a social system. The next section discusses the social and economic dimensions of the Kenyan context to highlight their interactions with the biophysical and political dimensions that I have examined.

2.2.3 Social and economic dimensions: issues and responses

Kenya is home to some 35 million people and, based on the 2001 population census it has an average national growth rate of 2.9 percent (Government of Kenya, 2001). The population has a very diverse socio-cultural composition of about 42 ethnic groups belonging to the Bantu, Nilotic and Cushitic main language groups. This diversity brings with it diverse cultural practices that influence people's ways of life, economic activities and environmental management (NEMA, 2007). Currently, most of the Kenyan population live in an environment that is increasingly characterised by high levels of poverty, high incidences of HIV/AIDS and malaria, ethnic unrest and insecurity[11], food insecurity and increased crime rates (NEMA, 2007, UNDP, 2006). Economic recovery since 2003 provided the country with a new opportunity for addressing some of these issues. However, the current political instability and ethnic unrest following the disputed December 2007 presidential elections, is a major setback to further economic growth.

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[11] First experienced in the advent of multiparty democratic elections in 1991, politically instigated ethnic violence remains the most infamous source of insecurity in Kenya. Attributed to political incitement, the politicians have used militia youth groups to carry out attacks on opposing communities (UNDP, 2006).

Poverty[12] remains a major issue and challenge for Kenya (see Government of Kenya, 2005a for details). It is a complex issue that is precipitated by historical, biophysical, political, social and economic dimensions of the country as described above. Poverty in the country is characterised and exacerbated by a lack of access to quality education and health, high dependency rates in households, diminishing employment opportunities, low productivity of family plots, lack of social policies and safety nets and poor basic infrastructure. Several factors predispose Kenyans to poverty and associated environmental risks. They include: the legacies of the colonial period, natural resource use conflicts, politically instigated ethnic clashes, cattle rustling, land conflicts, human/wildlife conflicts, urban crime and public security deterioration (UNDP, 2006). At the moment, nearly one in every two people in Kenya lives below the poverty threshold, the number having risen from 44.7 percent of the population in 1992 to 52 percent in 1997 and 56 percent in 2002 (NEMA, 2007). Such high poverty levels force people to engage in unsustainable farming practices; excessive use of wood fuel; and unsafe sewerage disposal (Government of Kenya, 2000)[13].

Related to the issue of poverty is that of food security. About 51 percent and 38 percent of the rural and urban populations respectively are food insecure (UNDP, 2006). The insecurity can be attributed to factors such as: droughts; inefficient food distribution systems, population growth and unemployment, among others. In addition to food insecurity, HIV/AIDS and malaria pose a major threat to the Kenya population and people's way of life. The current national HIV prevalence is estimated at 6.1 percent of the adult population, fortunately down from a prevalence rate of 16 percent in urban areas and eight percent in rural areas in the late 1990s (Government of Kenya, 2007a). The spread of AIDS in Kenya has shortened life expectancies from 57 years in 1990 to 47 years in 2000. This has stripped as much as 20 percent of the economic growth from the official figures. Addressing these issues requires a robust economy that is not dependent on donor funding, as is the case in Kenya.

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[12] Rasna Warah (2008), an editor with the United Nations argues that Kenya is one of the most unequal societies in the world. Ten percent of the country's 35 million people are said to control 42 percent of the nation's wealth, leaving more than half of the country's population to live below the poverty line (see UNDP, 2006).

[13] Inequality and poverty tend to manifest themselves ethnically and regionally, with some ethnic groups and regions benefiting more from public resources than others (see UNDP, 2006).

As with most other low income countries, Kenya relies on development partners for assistance towards economic development. Major development partners include the European Union (EU), Britain, the United States of America (USA), the World Bank and the International Monetary Fund (IMF). Power relations with these partners are usually unequal and characterised by what Hanmer *et al.* (2003) call a "stop-go cycle". For example, prior to the 2002 elections, donor relations with the Government of Kenya experienced a stop-go cycle that can be traced to the early 1980s. Hanmer *et al.* (*ibid.*) describe this cycle thus

> Concessional lending is agreed on the basis of conditionalities, which the government reneges on, or implements half-heartedly. Lending is suspended when donors find that conditionalities have not been adhered to. Then, after a cooling-off period on both sides, new negotiations begin, leading to new agreements and new lending commitments, accompanied by new conditionalities.

Hanmer *et al.* (*ibid.*) argue that the 1991 donor funding suspension triggered radical economic and political reforms between 1991 and 1995. Some of the political reforms included the introduction of multi-party politics in 1991. The National Rainbow Coalition (NARC) government that came to power after the December 2002 elections, with pledges to eliminate corruption and revive Kenya's economy, led to the resumption of donor funding. In January 2008, major development partners such as the EU threatened to stop donor funding if the current ethnic unrest and political instability were not quickly addressed (Agina, 2008). However, donor funding has been critiqued for marginalising the poor and increasing debt status in the recipient countries (Sachs, 1999). For example, the IMF and the World Bank Structural and Adjustment Programmes[14] (SAPS) of the 1980s are said to have aggravated poverty and environmental degradation in countries such as Kenya (Cheru, 2006; Sachs, 1999; UNDP, 2006). Conditionalities associated with donor funding manifest into unequal power relations within a project as later reported in Chapter

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[14] To address the failures of the 1980s SAPS, the IMF and the World Bank in 1999 introduced a new initiative that requires poor countries to develop the Poverty Reduction Strategy Paper (PRSP) in order to qualify for loans (Cheru, 2006). The PRSP rationale is that the fight against poverty cannot be won without the participation of poor people themselves. The PRSP approach embodies five principles (Dijstra, 2005). It should be: i) country-driven, introducing broad-based participation; ii) comprehensive, in recognition that poverty is a multidimensional phenomenon; iii) results-oriented, with emphasis on concrete results for the poor; iv) partnership-oriented; leading to better donor co-ordination under government leadership; and v) based on a long-term perspective. See Cheru (2006) and Dijkstra (2005) for a critique of PRSP.

7 (see Section 7.4.2). Moreover, over-reliance on donor funding also creates a *donor dependency syndrome* that constrains the capability of a country or organisation to generate its own sources of funding.

The Government of Kenya has made some attempts and achieved moderate success in addressing issues related to the social and economic dimensions of the environment highlighted above. Immediately after independence, the new Government adopted a paradigm of development shaped through the concept of *African socialism* that is contained in Sessional Paper No. 1 of 1965 (Government of Kenya, 1965). The main objectives of *African socialism* included political equality, social justice, human dignity with freedom of conscience, freedom from want, disease, and exploitation, equal opportunities and high per capita income. However, a critical review of the sessional paper (*ibid.*) reveals that these concerns were envisioned from a purely economic perspective. Economic development was seen to be the ultimate goal and not as a means to achieving sustainability. Resources were only invested in high potential areas leaving other areas underdeveloped. The current regional inequalities are thus historically based on skewed policies and inequitable resource allocations (Government of Kenya, 1965; UNDP, 2006). For this research, achieving a sustainable Kenya requires a consideration of all dimensions of the environment, as argued in this chapter and illustrated in Figure 2.1. The following argument from the UNDP *5th Kenya Human Development Report* gives further weight to this consideration (UNDP, 2006, p. 17):

> The increasing poverty trend in Kenya calls for newer sets of strategies that address poverty and inequalities and that create opportunities for those who need them, thus ensuring the sustainability. The process goes beyond attaining economic growth. It must comprise good governance, active participation of the population in the socio-economic and political life, equitable distribution of resources and benefits, and the establishment of efficient institutions.

This research applies a critical action research methodology to address issues related to organisational learning and sustainability at the NMK as implied in the above quote (see Section 1.4.3; see Chapter 5).

Since 1999 Kenya has been responding to incidences of high levels of poverty, occasioned by skewed policies and inequity through a number of strategies. These include the IMF sponsored poverty alleviation programmes. In March 1999, the Government launched its National Poverty Eradication Plan (NPEP) with the support of development partners, aimed at reducing incidences of poverty by 50 percent by the year 2015 (UNDP, 2006). In order to access the IMF Poverty Reduction and Growth Facility (PRGF) window, the Government prepared an interim Poverty Reduction Strategy Paper (PRSP) in 2000 (see Government of Kenya, 2000). In 2003, the country developed the Economic Recovery Strategy for Wealth and Employment Creation (ERSWEC) of 2003 to 2007 (Government of Kenya, 2003). The ERSWEC presents a multifaceted strategy to meet economic growth, equity and poverty reduction and governance objectives. To enhance governance, ERSWEC suggests a far-reaching reform of the judiciary, strengthening of rule of law and security and implementing reforms in the public sector, as highlighted in the previous section. The NMK, like all other government departments is required to ensure effective service delivery to the Kenyan public using the ERSWEC (see NMK, 2005; see also Section 2.3.2). To reduce poverty ERSWEC focuses on improving access to universal health, development of marginalised areas, upgrading living conditions for the urban poor and provision of universal primary education (Government of Kenya, 2003).

At independence the Kenyan Government recognised education as a basic human right and a tool for achieving a sustainable society (Government of Kenya, 2005c). Since 2003 many reforms have been undertaken within the education sector to address the overall goals of the ERSWEC, the delivery of policies set out in the Sessional Paper No. 1 of 2005 on *Policy framework for education, training and research*, the Education for All (EFA) and the Millennium Development Goals[15] (MDG) (Government of Kenya, 2005b). The first major initiative of these reforms was the launch and implementation of Free Primary Education (FPE) in January 2003. Free Primary Education is part of the process of attaining Education for All goals by the year 2015. In January 2008, the country started offering free tuition for

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[15] Through the Millennium Declaration of September 2000, 147 Heads of State and government, and 191 nations, Kenya included, committed their countries to meeting eight international development goals to respond to issues of poverty, environmental degradation and health (United Nations, 2000). The eight goals are to: eradicate extreme poverty, achieve universal primary education, promote gender equality and empower women, reduce child mortality, improve maternal health, combat HIV/AIDS, malaria and other diseases, ensure environmental sustainability and develop a global partnership for development (*ibid.*).

secondary education. The provision of quality education and training to all Kenyans is central to fostering a sustainable society in many ways (Government of Kenya, 2005c; see Section 2.4). Firstly, education processes that focus on developing learning capabilities to address sustainability issues in context as sought in this study is key to sustainable utilisation of the biophysical environment for livelihoods (see Section 2.2.1). Secondly, education that fosters critical thinking in learners is necessary for developing democratic institutions and promoting social justice in society (see Section 2.3.3). Thirdly, realisation of universal access to basic education and training may help address regional inequalities and high levels of poverty in Kenya. Finally, development of quality human resource (people) is fundamental to the realisation of Kenya's *Vision 2030* (Government of Kenya, 2007b; see also Section 8.4).

Vision 2030 is the recent ambitious Government development strategy that aims to transform the country into a globally competitive and prosperous nation with a high quality of life by the year 2030 (Government of Kenya, 2007). It identifies three priority areas for achieving a sustainable Kenyan society. These are: i) maintaining a sustained economic growth of ten percent per annum over the next 25 years; ii) fostering a just and cohesive society enjoying equitable social development in a clean and secure environment and iii) ensuring an issue-based, people-centred, result-oriented and accountable democratic political system. The last two areas are relevant to this research which has an explicit commitment to social justice and democracy that underpins sustainability change initiatives in organisations (see Sections 1.4.3, 8.3 and 8.5). This is especially relevant at this time, after the recent political turbulence which created major setbacks to the achievement of the *Vision 2030* development strategy[16]. The study advances communicative interactions as ongoing environmental education processes for learning and social change in the context of achieving sustainability. Communicative interactions, as advanced by the research, are based on the premise that democracy develops through involving actors in making decisions that affect them and not through imposition of solutions by powerful outsiders (see Section 1.4.2).

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[16] I include this statement to show an ongoing reflexive engagement between what I am producing in the *thesis* action research project and the changed circumstances in Kenya.

The NMK as a part of the Kenyan social system is influenced by the biophysical, political, social and economic dimensions described above. The next sections present the NMK organisational context within these dimensions with regard to exploring organisational learning and sustainability.

2.3   The NMK organisational context

The NMK is a state corporation established by an Act of Parliament, the *National Museums and Heritage Act of 2006* (Government of Kenya, 2006). It has a workforce of about twelve hundred employees and falls under the Ministry of Heritage, part of the Government of Kenya. The NMK has diverse resources and activities that focus on conservation, education and research (NMK, 2005). Although most of the research and conservation programmes are based at the Museum Hill site headquarters in Nairobi, the NMK has several regional museums, sites and monuments spread across the country. The coastal historical sites and museums such as Lamu, Fort Jesus and Gede are some of its main regional museums. The history of NMK dates back to its humble beginnings in 1910 with the support of the East African Natural History Society (now Nature Kenya). It was named the Coryndon Museum in 1930 and renamed National Museums of Kenya in 1964 (see Farah, 2006 for details). At the start of this study, the organisation's mandate was defined by two Acts: the *National Museums Act, 1983* and the *Antiquities and Monuments Act, 1983* (Government of Kenya, 1983a, 1983b). The two Acts have been repealed as part of the Museum in Change Programme and the organisation now operates under the *National Museums and Heritage Act, 2006* (Government of Kenya, 2006; see also Section 8.6.3). The new act became operational on 8 September 2006.

This research is designed to explore the Museum in Change Programme to generate context-specific critical understanding of organisational learning and sustainability (see Section 6.2.3). The Museum in Change Programme refers to the major organisational changes and reforms the NMK is undertaking as a response to the Kenya Civil Service Reform Programme described in Section 2.2.1. The changes aim to enhance the management and conservation of Kenyan heritage towards addressing some of the broader contextual issues highlighted in the previous sections. In this part of the chapter, I present

the NMK organisational context by outlining the vision, mission, core functions and management structures of the organisation as they relate to fostering a sustainable society.

2.3.1 Vision, mission and management structure

The vision of the NMK is "to be a centre of excellence in heritage management and research for the benefit of humanity" (NMK, 2005, p. vii). The functions and mandate of the organisation are summed up in the following long mission statement (*ibid.* p. vii):

> A centre for collecting, documenting, and preserving, researching, studying and presenting our past and present cultural and natural heritage and to enhance knowledge, appreciation, respect, management and use of these resources for the benefit of Kenya and the world.

This study aims to improve organisational learning and sustainability practices as implied in the above vision and mission statements (see Sections 7.3.2 and 8.6). Following the *National Museums and Heritage Act, 2006* the NMK is mandated to perform the following core functions (Government of Kenya, 2006, pp. 135-136):

- Serve as national repositories for things of scientific, cultural, technological and human interest (see Section 8.6.1).
- Serve as places where research and dissemination of knowledge in all fields of scientific, cultural, technological and human interest may be undertaken.
- Identify, protect, conserve and transmit the cultural and natural heritage of Kenya.
- Promote cultural resources in the context of social and economic development (see Section 8.6.1).

Section 2.3.3 of this chapter provides further details on these functions to underscore the role of the NMK in fostering a sustainable Kenyan society. At the start of this study, the organisation performed these functions through 17 research departments that have now been reorganised within five directorates as a result of the Museum in Change Programme that I describe later. In terms of management structure the NMK is governed by a Board of Directors whose Chairman is appointed by the Minister for Heritage after consultation with the President (Government of Kenya, 2006). The Director General who is appointed by the

Minister on the recommendation of the Board is the chief executive officer. The Director General is responsible to the Board for the day-to-day management of the NMK. Under the Director General are five directorates through which the NMK mandate is implemented. These directorates are (NMK, 2005):

1. *Directorate of Research and Collections*

   This directorate undertakes research, management, collection and documentation of natural and cultural aspects of Kenyan heritage. It performs these functions through six departments that house over 4.5 million research collections. The departments are Zoology, Botany, Earth Sciences, Centre for Biodiversity, Cultural Heritage and the Resource Centre. These departments now include sections that operated as independent departments at the start of this study. For example, Zoology where all zoological research is undertaken consists of mammalogy, herpetology, ornithology, invertebrate zoology, ichthyology and osteology as constituent sections.

2. *Directorate of Institute of Primate Research*

   The Institute of Primate Research (IPR) is a World Health Organisation (WHO) collaboration centre which conducts biomedical research about infectious diseases such as malaria and HIV/AIDS, using non-human primates. The Institute of Primate Research has three departments: Administration, Animal Resources and Research.

3. *Directorate of Regional Museums, Sites and Monuments*

   This directorate manages regional museums, sites and monuments that are spread across the country. Some of the regional museums include Lamu, Fort Jesus, Kitale, Karen Blixen, Meru and Kisumu. The directorate has three Assistant Directors in charge of the Coast, Central and Western regions. The Nairobi Museum and all the regional museums are open to the public. They exhibit Kenya's natural and cultural heritage for the purpose of raising public awareness and education.

4. *Directorate of Human Resource and Administration*

   The directorate is responsible for human resource policy formulation and management, administration and procurement processes. At the time of this study, it was the weakest in terms delivering the envisaged functions (see Section 8.4.1).

5. *Directorate of Development and Corporate Affairs*

This directorate has the mandate to coordinate all the development and marketing activities at the NMK. At the beginning of the research the head of the directorate had not been appointed, although the appointment has occurred since. The directorate's roles of enhancing information flows and identity of the NMK are some of the key issues that this study is exploring (see Sections 8.2.2 and 8.6.2).

Operating alongside these directorates are the Audit Office, Research Institute of Swahili Studies in Eastern Africa (RISSEA), Legal Office and the Finance Department. The Director General, all heads of directorates (Directors), the legal officer and financial controller constitute the top NMK management team and form the Directors Executive Committee (DEC). The DEC, in consultation with heads of departments makes decisions related to the day-to-day management of the NMK. This research drew participants from all the directorates (see Section 6.3.2). It explored the different and complex ways in which power operates at the NMK to influence organisational learning and sustainability (see Sections 5.2.2, 7.2.1 and 7.4.2). Specifically, this study undertakes a critical organisational analysis of the NMK in order to identify contextual factors that enable or constrain sustainability change (see Chapter 7). In Chapter 3 I argue that the power to enable organisational learning and sustainability exists by virtue of the irreducible social relations that constitute the NMK within the management structures described above (see Sections 3.2.4 and 3.3.2). The next section provides a brief account of organisational changes at the NMK.

2.3.2   Past and existing organisational changes

The capability of an organisation to effect any change is affected by its previous change experiences or historical context of change (de Caluwé & Vermaak, 2003; Hughes, 2006). Any understanding of the organisational changes at the NMK is thus related to its change history and the Kenyan contextual influences discussed earlier. To highlight the *drivers* of change at the NMK, this section provides a brief account of change history at the organisation. It then outlines components of the Museum in Change Programme.

Major organisational changes that led to the expansion of the NMK in terms of infrastructural development and functions started way back in the 1980s (see Section 7.4).

These changes resulted in the construction of the natural sciences buildings that house scientific laboratories and offices. More research departments were created thereby increasing scientific collections at the organisation. This expansion witnessed the development of much research that was linked to donor-driven projects. For instance, following the Rio Summit of 1992 there was more focus on biodiversity conservation research projects. This saw the creation of the Centre for Biodiversity at the NMK and increased biomedical research at the Institute of Primate Research. However, the rapid increase of donor-driven projects at the NMK led to creation of many departments and disjointed research activities. This led to a lack of synergy between departments and duplications of roles (see Sections 7.4 and 8.6.1). The NMK faced challenges similar to those associated with poor governance systems in the Kenyan public sector, as earlier highlighted earlier in Section 2.2.2 (see Deloitte & Touche Consultants, 2001; see also Section 8.3). Like other Government institutions, the NMK was expected to address these challenges as a response to the Civil Service Reform Programme. It is against this background that the NMK initiated major changes with a view to becoming an efficient, productive and results-oriented heritage organisation.

Through EU funding, a preliminary study for restructuring the NMK was carried out in 1998 to recommend ways of streamlining the core functions of the organisation (see Hunting Technical Services, 1999). The study recommended a review and an update of the laws relating to museums and heritage conservation, redefining of core functions and management structures and upgrading facilities. In 2001, the NMK commissioned Deloitte and Touche management consultants (Deloitte & Touche, 2001) to rationalise its operations. The Consultants identified a number of governance issues at the NMK similar to those highlighted in Section 2.2.2 and reported in Chapter 8. The Museum in Change Programme was conceived in 2001 to undertake reforms towards improving efficiency and productivity. The Museum in Change Programme is a bold strategy to transform the NMK into a leading centre of excellence in heritage management, conservation and research. The organisation started implementing the programme in 2001. The Museum in Change Programme is defined by four components that reflect the broad areas of the Civil Service Reform Programme described in Section 2.2.2.

1. *Review of legislative framework.*

   As stated earlier, a new legislation – the *National Museums and Heritage Act, 2006* (Government of Kenya, 2006) – became operational on 8 September 2006. This has redefined the role of the NMK and increased the legislative capacity to manage and conserve Kenya's heritage (see Section 8.6.3).

2. *Revitalisation and expansion of the Nairobi Museum*

   Through EU funding, this component implements major infrastructure developments at the Nairobi Museum with a view to increasing exhibition space, creating new administration block and establishing a visitors' centre.

3. *Reorganisation of management structures*

   As mentioned in the previous section, a new management structure has been implemented to increase efficiency in the governance systems of the NMK. This component is central to this study, as most of the contextual issues it explores are related to governance systems (see Section 8.3).

4. *Revamping of public programmes and development of human resources*

   Aspects of this component were funded by the EU with a view to making public programmes at the NMK more interactive, interesting and educative (see NMK, 2004). These programmes aim to promote the appreciation, conservation and sustainable utilisation of heritage in Kenya (Farah, 2006). The research directly contributes to this component by seeking to develop the learning capacity of the NMK to address sustainability issues (see Section 8.4).

These components of the Museum in Change Programme aim to strengthen the institutional capacities of the NMK to contribute to a sustainable Kenya. The expansion of the Nairobi Museum and the revamping of public programmes were financed by the EU[17] under the auspices of the Poverty Reduction Strategy Paper (see Section 2.2.3) and the NMK Support Programme. This research explores aspects of the NMK Support Programme to provide insights into donor-recipient power relationships such as those reported in Chapter 7 (see

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[17] The EU provided the Kenyan Government a grant of 8 million Euros to support the implementation of the Museum in Change Programme. This was the first time the EU gave such a grant to a heritage institution in Africa. Although the financial agreement between the Kenyan Government and EU was signed in 2001, it was not until December 2005 that major activities within the NMKSP started. The implication for this is that what was essentially a five-year project had to be completed in only one and half years.

Section 7.4).In the next section I examine the role of the NMK in fostering and contributing to a sustainable Kenya through the implementation of heritage conservation and environmental education processes.

2.3.3 The role of the NMK in enhancing sustainability

Like other corporations in Kenya, the NMK is a critical actor in the economic, social and political development of the country. As Gatamah (2004) argues, corporations are responsible for building social and economic conditions that foster the development of agents and the well-being of the society. The NMK is thus expected to draw upon its substantial resources to address sustainability issues in society. This contribution is to a large extent influenced by the dimensions of the Kenyan context that I described in Section 2.2.

Through its education, conservation and research functions the NMK contributes to an understanding of the Kenyan environment within a framework of a *wheel of interacting global concerns* depicted in Figure 2.1. The organisation offers diverse heritage conservation and environmental education processes in addressing the interacting dimensions of the environment as advanced in this chapter. Drawing upon over 4.5 million natural history and cultural collections the NMK develops environmental education programmes that address issues related to democracy, conservation, peace and economy in Kenya (Farah, 2006; NMK, 2005). Such programmes aim to create public awareness about the importance of conserving and sustaining utilisation of Kenya's unique natural and cultural heritage (see Atiti, 2003b). In its efforts to contribute to socio-ecological sustainability, the NMK manages over 250 gazetted sites across the country. They include Koobi Fora Paleontological Site and the pristine Lamu Island that are listed as World Heritage sites (see Section 2.2.1). The NMK houses rare and threatened species of fauna and flora that are of importance to science and in national development. The organisation runs several community-based programmes towards biodiversity conservation in the country (see Muhando, 2006). It plays an advisory role towards Kenya's implementation of major international agreements, as explained in Section 2.2.1.

The NMK undertakes a wide range of research activities based on Kenya's heritage (see Farah, 2006). Research on human evolution places the organisation as a leading research institution in the field of palaeontology[18]. Fredrick Manthi, a researcher at the NMK, recently made a landmark discovery of two new hominid fossils that challenge the current widely held theory about human evolution (see NMK, 2007 for details). The East African Herbarium, the oldest and largest research section at the organisation, undertakes research on the taxonomy, distribution, use and conservation of plants in the region. Research activities at the NMK generate useful information that is central to a critical understanding of the interactions between the biophysical, political, social and economic dimensions of the environment. Such information is disseminated to the Kenyans and the world through museum exhibitions, educational programmes and scientific journals. For instance, between 1993 and 1998, the NMK published 190 professional articles based on research into development and environmental issues (Deloitte & Touche, 2001).

The NMK plays a major role in addressing some of the social and economic issues described in Section 2.2.3. Through its research on indigenous knowledge systems and ethnographic studies, the organisation promotes cross-cultural understanding in Kenya (Farah, 2006; Muhando, 2006). The integration of indigenous knowledge and modern technology is fundamental to achieving sustainable utilisation of natural resources in the country (Muhando, 2005). As part of its mandate, the organisation is expected to use its vast cultural resources to promote inter-ethnic understanding within the current diverse Kenyan ethnic groups (Hunting Technical Services, 1999; see Section 2.2.3). It has the capacity to foster effective integration of culture with the dynamics of development (Hunting Technical Services, 1999). To actualise this potential, the NMK is collaborating with local communities to establish ecotourism programmes that integrate dynamics of culture and economic development (Muhando, 2006). Two such programmes are the Kaya

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[18] The NMK is world renown for its research collections on hominid fossils. Hominid fossil evidence from research that was spearheaded by the Leakey family has made Kenya to be regarded as the cradle of humankind. Kenya is well known for the many fossil sites within the Rift Valley and the Lake Victoria region. Palaeontologic research at the NMK focuses on these sites to reconstruct the evolutionary history of human and other animal species (NMK, 2007).

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Kinondo ecotourism project and Kipepeo Butterfly[19] farming in the coastal region (*ibid*.).
The Kaya Kinondo programme that started in 2001 aims at conserving and utilising the
Kaya sacred forests along the southern coast of Kenya. It develops culturally sensitive
tourism activities that include educating visitors about medicinal plants and cultural values
of the community. Kipepeo Butterfly farming in Arabuko-Sokoke Forest provides another
example where the NMK utilises natural heritage for the economic well being of the
surrounding communities. Through such projects, it is evident that the NMK plays a
significant role in fostering the economic, social and cultural development of the country
(see also Section 8.6). The organisation contributes to poverty alleviation programmes in
Kenya by promoting sustainable utilisation of resources within local communities (see
Section 8.6.2).

Despite such activities, the NMK faces challenges in addressing sustainability issues that
arise from the interacting dimensions of the environment as discussed earlier in the chapter
(see Section 2.2). Such challenges arise from the agential, structural and cultural dynamics
of the organisation that are reported in Chapters 7 and 8. An understanding of these
dynamics, referred to as *morphogenetic relationships* in this study, is essential to
addressing sustainability issues and challenges. Viewed as a social system, the NMK
possesses structural and cultural emergent properties that *condition* social interactions by
supplying actors with reasons for pursuing sustainability change or stability (Archer, 1995;
see Sections 3.2.2 and 9.3). I designed this study to develop participant learning capability
and reflexivity to address sustainability issues at the NMK (see Section 1.3.1). The research
focuses largely on addressing political and social dimensions of sustainability (see Sections
4.3.1, 8.3 and 8.4). As stated in Chapter 1 (see Section 1.3.1), the study critically reviews
assumptions and values underlying the NMK with a view to exploring alternatives from
critical theory perspectives (see Sections 5.2, 7.3 and 8.3.1). This requires environmental
education approaches that emphasise context, reflexivity, criticality and open social

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[19] The Kipepeo Butterfly farm project was started in 1993 to help farmers earn income from forest-based
farming activities (Muhando, 2006). In this project, farmers who live next to Arabuko-Sokoke Forest near
Gede Museum collect butterfly larvae and raise them on forest trees into pupae. The farmers then sell the
pupae to the Kipepeo Project which ships the pupae to Europe and North America where they are used for
live butterfly displays.

learning processes of change and development (Lotz-Sisitka, 2004) as illuminated in the next section.

2.4   An overview of environmental education and sustainability

There is an increasing global commitment to the role of education and learning in transition towards sustainability (UNESCO, 2004). The last century has witnessed development in education from nature conservation, through environmental education, to education for sustainability (Capra, 2007). There has been a shift from content and predetermined learning outcomes to transformative, community-based learning that focuses on social change (Sterling, 2007). However, the Kenyan context, in which this study was conducted, is still influenced by the traditional approaches to environmental education that are characterised by transmissive expert-based teaching and learning (Atiti, 2003b). Like other scholars in environmental education in southern and eastern Africa (e.g., Babikwa, 2003; Janse van Rensburg, 1995; Lotz-Sisitka, 2004; Lupele, 2007; SADC REEP, 2002) I consider environmental education as open processes of learning and social change that incorporate sustainability as a major theme.

This section presents an overview of the field of environmental education as the epistemological context of this study. With reference to historic documents such as the Belgrade Charter (UNESCO-UNEP, 1976), Tbilisi Principles (UNESCO-UNEP, 1978) and *Agenda 21* (UNESCO, 1992), I first I provide an overview of how environmental education has evolved over the years

2.4.1 Evolution, development and critiques of environmental education

The field of environmental education is a complex and rapidly evolving one that captures a variety of contexts, perspectives and understandings (Hart, 2003). Its beginning can be traced back as far as the interested researcher wishes (Sterling, 2004). Details on the history and essence of environmental education at the international level are clearly documented by authors such as Greenall-Gough (1997) and Palmer (1998). The first United Nations Conference on the human environment was held in Stockholm, Sweden in June 1972. This conference recognised human responsibility to protect and improve the environment for

present and future generations. It created the UNESCO-UNEP International Environmental Education Programme (IEEP) to develop, promote and fund environmental education (Mckeown & Hopkins, 2003). The IEEP developed the fundamentals of environmental education that appear in the Belgrade Charter (UNESCO-UNEP, 1976). Twenty years after the Stockholm conference, the Rio Earth Summit was held to once more deliberate the relationship between humans and the environment (UNESCO, 1992). The Earth Summit adopted *Agenda 21* as global plan of action for sustainable development. Together with the Belgrade Charter (UNESCO-UNEP, 1976) and the Tbilisi Declaration (UNESCO-UNEP, 1978), *Agenda 21* (UNESCO, 1992) are considered as historic documents that define the goals and context of environmental education. Other documents that have shaped and influenced the development of environmental education include the *World Conservation Strategy* (IUCN, UNEP, & WWF, 1980), *Our Common Future* (WECD, 1987) and more recently the United Nations Decade of Education for Sustainable Development Declaration (UNESCO, 2004).

The translation of global environmental education definitions, objectives and principles into specific policies, programmes and resources at national and community levels has been sought in these documents (Hart, 2003). For example, fundamentals of environmental education such as a holistic and interdisciplinary approach, values education, inquiry-based learning, futures perspectives, a focus on critical thinking and the development of an environmental ethic are contained in the Belgrade Charter[20]. These fundamentals, which are central to my research, were endorsed as the Tbilisi Principles (UNESCO-UNEP, 1978). The Tbilisi Declaration provides goals about awareness, knowledge, skills, values and participation as a broad approach to environmental education. The tripartite model of education *in* (or through), *about* and *for* the environment (see Fien, 1993a) which is based on these goals provides a useful framework for defining environmental education. *Agenda 21* highlights the important relationships between the environment and development. It

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[20] Some of the characteristics of environmental education captured in the Belgrade Charter include: environmental education should consider the environment in its totality; be a continuous life-long process; be interdisciplinary in its approach; put emphasis on active participation in the resolution of environmental issues; examine major environmental issues from a global standpoint while considering regional differences; focus on current and future environmental scenarios; examine all development and growth from an environmental perspective; and promote local, national and international collaboration in resolving environmental issues (Palmer, 1998, pp. 10-11).

emphasises issues such as poverty alleviation and participation of marginalised groups in decision-making processes.

However, McKeown and Hopkins (2003) critique the Belgrade and Tbilisi documents for putting more emphasis on the *environment* at the expense of society, economics and development. Sterling (2004) argues that environmental education has been traditionally concerned with the quality of the environment and less with the social, economic and political aspects of change. As a result, environmental education has fallen short of achieving the ambitious goals of Tbilisi (McKeown & Hopkins, 2003). McKeown and Hopkins (*ibid.*) call for reorienting education towards sustainable development in support of *Agenda 21*, particularly in Northern and Western country contexts. In Latin America and Eastern and Southern Africa, environmental education processes have been intertwined with political, economic and social issues given the nature of poverty and risks, and the lack of easily available solutions to environmental concerns (Gonzălez-Gaudiano, 2007; Lotz-Sisitka, 2004; O'Donoghue, 2007). Although sustainable development has received global prominence and acceptance at a certain level of policy-making, it has also been appropriated by economic interests (see Gonzălez-Gaudiano, 2007). Consequently, Lotz-Sisitka (2004) warns us against adopting the notion of *sustainable development* as a salvation narrative for contemporary biophysical, political, social and economic issues such as those discussed in this chapter. Drawing on Popkewitz (2000) who advises questioning of narratives of social and educational reform in ways that go against the grain, Lotz-Sisitka (2004) recommends a reflexive and cautious engagement with sustainable discourses in education.

As stated at the beginning of this chapter, this research views the *environment* holistically to encompass the "interactions between our physical surroundings and the social, political and economic forces that organise us into the context of these surroundings" (Di Chiro, 1987, p.25; see Section 2.2). Locating this study within the field of environmental education is based on the premise that framings of environmental learning processes in eastern and southern Africa incorporate a concern for the social, biophysical, political and economic dimensions of the environment (see Atiti, 2003b; Lotz-Sisitka, 2004). Environmental education processes in the region have focused on the environment and

development issues for a long time, and have recently considered *sustainability* as a key theme in achieving sustainable livelihoods (Lotz-Sisitka, 2004). This research therefore, embraces principles and values related to sustainability as highlighted in *Agenda 21* (UNESCO, 1992) and as explained in the next section.

2.4.2 Reorientation of education towards sustainability

According to Lotz-Sisitka (2004), the solution to global issues is seen as sustainable development[21]. She argues that this salvation narrative that involves ensuring social development, ecological sustainability and economic development is increasingly making its way into education systems and discourse. The dominance of the sustainable development narrative is evidently a shaping influence on environmental education theory and practice (see Fien & Tilbury, 1998; Scott & Gough, 2003; Tilbury, 2003). This section draws upon the *Agenda 21* document to indicate how the narrative shapes environmental education and this study.

Chapter 36 of *Agenda 21* (UNESCO, 1992), the action blueprint from the 1992 Rio Earth Summit, emphasises the need for wide-scale environmental education programmes in diverse settings that include organisational contexts. It calls for the need to reorient all education and training towards sustainable development. Four areas are identified for such a reorientation, improving the quality of and access to basic education, reorienting education to sustainable development, increasing public awareness and promoting training. As a result, *Agenda 21* provides a wide vision for environmental education by placing more emphasis on the human dimensions of environmental issues. An appropriately reoriented education embraces more principles, skills, perspectives and values related to sustainability than currently included in most education systems (McKeown & Hopkins, 2003). For Environment Education to remain relevant, it needs to consider core principles of equality, social justice, interspecies justice and intergenerational justice (Palmer, 1997; see Section 2.2). This research fosters these principles with a view to developing the organisational learning *capacity* of the NMK to address sustainability issues in context (see Chapter 7).

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[21] Many environmentalists view the notion of *sustainable development* as a "little more than a political cover for otherwise unacceptable corporate environmental practices" (Paehlke, 1999, p.243). This research prefers the use of the term *sustainability* as it has less political baggage and is often associated with issues relating to quality of life rather than merely development (Tilbury & Cooke, 2005).

Environmental education, training and information permeate the 39 chapters of *Agenda 21* under the notion of *capacity building* (UNESCO, 1992). The emphasis on capacity building refers to both capacity of people and institutional capacity (see Section 8.7.2). This explains the focus of the research on organisational learning at the NMK (see Section 4.2).

Following the Rio Summit, UNESCO was appointed as the implementing agent for Chapter 36 of *Agenda 21*. To review developments since the Rio Summit, the World Summit on Sustainable Development (WSSD) was held in Johannesburg, South Africa, in 2002 (UNESCO, 2002). WSSD emphasised the integration of the environment, economy and social as *three pillars* of sustainable development (Tilbury, 2003; United Nations, 2002). Education for sustainable development was recognised as the implementation tool for integrating these pillars (McKeown & Hopkins, 2003). According to Blewitt (2005, p. 182), education for sustainable development is about "understanding our experience of, and impact on, a world characterised by uncertainty, complexity and risk". The use of education for sustainable development and other related terms such as *education for sustainability* seems to have confused, if not fragmented the field of environmental education (Hart, 2003). This is evident in the debates and discussions among educators on the distinctions between environmental education and education for sustainable development (see Hesselink *et al.*, 2000; Mckeown & Hopkins, 2003 for details).

Lotz-Sisitka (2004, p. 16) argues that "while much is made of the notion of education for sustainable development at an international level, it seems that very little clarity of meaning associated with this notion has 'settled' amongst policy makers". She goes on to say that there is real danger that the *critical edge* of environmental education processes may disappear within the broadening framework of sustainable development (*ibid*.). According to Wals & Jickling (2003), directing education towards sustainable development narrows possibilities for creative alternatives. They argue that sustainable development may not be the last word on how the world may solve its environmental problems (see also Jickling, 1999). It is not the purpose of this study to seek to settle or take sides on the education for sustainable development debate, but rather to point out that within both environmental education and education for sustainable development useful ideas can be discerned for exploring organisational learning and sustainability as sought in this study. Furthermore,

what matters is not what label is used (Tilbury & Cooke, 2005), but what is done as part of enabling social change processes and the emergence of sustainability, as sought in this study.

The research adopts a more open-ended approach to exploring organisational learning and sustainability. I do acknowledge that the field of environmental education, in which this study is located, cannot be isolated from other emerging fields, such as education for sustainable development, that have a strong focus on sustainability. The recent Ahmedabad Conference, which marked 30 years after the Tbilisi Declaration has highlighted the significance of environmental education processes within a wider framing of education for sustainable development and the Decade of Education for Sustainable Development (see CEE, 2007). This aimed at moving away from earlier oppositional discourses which viewed environmental education and education for sustainable development as two seemingly different fields of theory and practice. Achieving sustainability in organisations and society requires a multidisciplinary approach that traverses fields. It involves seeking out the productive relations between historically constituted knowledge fields in response to challenging and complex issues and risks. It is against this background that the study draws upon the notion of *organisational learning* found in business management literature. Chapter 4 discusses both organisational learning and sustainability as learning processes of social change within communities of practice (see Sections 4.2.2 and 4.3.3). In the next section I examine socially critical and reflexive approaches to environmental education for exploring organisational learning and sustainability as processes of change.

2.4.3 *Environmental education as open processes of learning and change*

Learning is seen by the United Nations (UN) agencies, such as UNESCO, as a key component of innovation and social change towards a more sustainable society (Scott & Gough, 2003). The declaration by the UN for a Decade of Education for Sustainable Development reflects a global commitment to the role of education and learning in transition to sustainability (UNESCO, 2004). This research draws upon philosophical and theoretical frameworks that emphasise social change in society (see Section 1.4). The study applies the concept of *communicative interactions* to advance environmental education

processes that are contextual, critical, reflexive and open-ended (see Section 1.5.1). In what follows I discuss environmental education as open processes of learning and social change.

This research is concerned with fostering social justice, democracy and participation in an organisational context (see Sections 5.3.1 and 8.3). It considers both organisational learning and sustainability as ongoing environmental education processes of social change and development (see Chapter 4 for details). O'Donoghue (1997) argues that such processes need to be explored through reflexive historically-located empirical analysis. Drawing upon Archerian (1995) morphogenetic theoretical framework to analyse and explain organisational changes seeks to achieve this (see Section 3.3). This has the potential of opening up a contextual engagement with social change and development at the NMK. Janse van Rensburg (1995) identifies three different approaches to social change thus:

1. *Change as restoring order*

   This reflects managerial orientations to change that dominate organisational studies literature. The Museum in Change Programme takes on this orientation, informed by a *strategic choice theory* that I highlight in Chapter 3 (see Sections 3.2.1 and 7.4).

2. *Change as resolution of practical issues*

   The approach involves community problem-solving orientations that are underpinned by liberalist ideologies.

3. *Change as reconstruction*

   Change as reconstruction reflects a critical orientation that this study takes on (see Sections 1.4.3, 5.2 and 7.3). The research aim on reviewing basic assumptions and values underlying the NMK sought to reconstruct possibilities for sustainability change at the organisation (see Sections 1.3, 7.3 and 9.3).

Janse van Rensburg (1995) further recommends a reflexive orientation to social change that emphasises process rather than product. This view of change is congruent with the critical action research methodology that underpins this study (see Section 5.3). I illuminate key features of socially critical and reflexive approaches to environmental education to ground this orientation further.

The work of authors such as Fien (1993a), Huckle (1996) and Sterling (1993, 2004) who have written on environmental education and sustainability from a perspective of socially critical education, is instructive for this study. In his curriculum theorising on environmental education, Fien (1993a) highlights three different orientations to the world and also education: neo-classical, liberal and socially critical (see also Habermas, 1971 on knowledge and human interests). Although this categorisation has its limitations, it also has considerable value, particularly when explaining social change processes as stated above (see Babikwa, 2003 for a discussion on the orientations). A socially critical orientation to environmental education that is central to this research has a number of distinguishing features (Fien, 1993a). Fien distils them as critical environmental consciousness, critical thinking and problem solving, environmental ethics and political literacy. These features have the potential for enabling transformational learning and social change at the NMK, as sought in this study. For example, developing an environmental ethic[22] based upon concern for social and ecological sustainability may develop agential learning capabilities to deliberate and address sustainability issues in context. The dynamics of communicative interactions discussed in Chapter 4 offer strategies for achieving this goal (see Section 4.4).

Fien and Trainer (1993; see also Huckle, 1993) argue that social change in regard to achieving sustainability cannot be accomplished without altering structural and cultural factors in an organisation (see Section 3.3 for details). Structural and cultural changes require challenging assumptions and values underlying organisations with a view to exploring critical alternatives (see Chapter 8). It also requires an in-depth understanding of morphogenetic relations within an organisation as discussed in the next chapter (see Section 3.3). Writing from a management point of view, Doppelt (2003) argues that cultural change is fundamental to achieving sustainability in organisations. Cultural change requires changing beliefs, ideas, assumptions and relations that are inconsistent with sustainability in an organisation (see Section 7.3). Most change initiatives fail because very few change agents fully grasp the deep-seated paradigm shift inherent in sustainability. Furthermore, most do not know how to stimulate widespread cultural change. Doppelt

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[22] An environmental ethic contains two sets of values on social sustainability and ecological sustainability (see IUCN, UNEP & WWF, 1991; Fien & Tilbury, 1998). This study was mainly concerned with social dimension of sustainability where values on basic human needs, equity, human rights and participation are considered.

(*ibid.*) notes that the inability to plan and achieve far-reaching cultural change accounts for many of the problems that organisations face when seeking to embrace sustainability principles. Doppelt further argues that changing culture requires altering governance systems and improving leadership in an organisation (see also Section 2.2.2).

To end this section, I argue that socially critical and reflexive approaches to environmental education offer useful epistemological tools for exploring organisational learning and sustainability (see Sections 3.4 and 5.3). Nevertheless, some educators (e.g. Jickling, 1999) have raised concerns that due to their strong position on the causes of and solutions to social problems, socially critical approaches can become a new form of domination (see also Section 5.2.4 for critiques of critical theory). To address this concern, I also draw upon social learning theory that considers the significance of morphogenetic relationships and communicative interactions in fostering a sustainable society and environment (see Section 4.2). This orientation further addresses the limitation of exploring organisational and sustainability based on individual learning theory (see Chapter 4).

2.5   Summary

This chapter has positioned organisational learning and sustainability within the broader Kenyan, NMK and environmental education epistemological contexts of which it is a part. It has examined the broader Kenyan context systemically as the interactions of biophysical, political, social and economic dimensions of the environment. Linked to these dimensions are global concerns for achieving democracy, conservation, peace and development in context. The chapter has highlighted various issues that arise from the Kenyan environment and how they influence the NMK where this research was carried out. The issues include, environmental degradation, high levels of poverty, poor governance, ethnicity, endemic corruption, food insecurity and prevalence of HIV/AIDS. As a response to some of these issues, the Kenyan Government is implementing poverty alleviation programmes and undertaking major reforms to its public service and education sectors.

The chapter has presented the NMK organisational context by outlining the vision, mission, core functions and management structures of the organisation as they relate to fostering a

sustainable society. The NMK is governed by a Board of Directors in liaison with a Directors Executive Committee. To highlight the *drivers* of change at the NMK, I provided a brief account of the change history of the organisation. The chapter outlined components of the Museum in Change programme that echo those of the Kenya Civil Service Reform Programme. As a centre of excellence in heritage conservation, management and research, the NMK plays a crucial role in the social, economic and political development of Kenya. To set the epistemological context of the study, the chapter provided an overview of environmental education and sustainability with reference to historic documents such as the Belgrade Charter, the Tbilisi Declaration and Agenda 21. I have considered environmental as open processes of learning and social change. The chapter has pointed out the need to explore both organisational learning and sustainability as ongoing environmental education processes of social transformation and change (see Chapter 4).

To explore organisational learning and sustainability as open, critical and reflexive processes of organisational change in context, the study requires appropriate social theories for understanding organisational change. Part 2 that follows this chapter discusses the theoretical foundations of the study. In Chapter 3 I examine the Archerian morphogenetic approach and Habermasian critical theory as appropriate social theories for understanding organisational change in the context of organisational learning and sustainability.

PART 2   Theoretical Foundations of the Study

This part discusses theoretical foundations for exploring organisational learning and sustainability in a community of practice. I examine three theoretical frameworks as introduced in Part 1. These are the Archerian morphogenetic approach, Habermasian critical theory and the communities of practice approach of Lave and Wenger. This part also examines the role of social theory in understanding change processes and the emergence of organisational learning and sustainability in communities of practice. It presents the Archerian morphogenetic approach as an appropriate theoretical framework for analysing and explaining social changes processes in a community of practice. Habermasian theories of communicative action and deliberative democracy are discussed as suitable epistemological lenses for analysing processes of participation in a community of practice. The Lave and Wenger communities of practice approach provides a unit of analysis for investigating processes of social change (morphogenetic relationships) and participation (communicative interactions) in an organisational context. It also offers a social theory of learning founded on practice for exploring organisational learning and sustainability in organisations.

Part 2 contains the following chapters:

Chapter 3   **Understanding Organisational Change**

Chapter 4   **Exploring Organisational Learning and Sustainability as Social Learning Processes**

Chapter 3 Understanding Organisational Change

3.1   Introduction

Chapter 2 presented the National Museums of Kenya (NMK) and the broader Kenyan contextual influences in exploring organisational learning and sustainability. It examined challenges and responses in addressing complex environmental and sustainability issues towards achieving social change. This chapter discusses the role of contemporary social theory in understanding organisational change and development. The Archerian morphogenetic approach and Habermasian critical theory introduced in Chapter 1 (see Sections 1.4.1 and 1.4.2) respectively, provide ontological and epistemological lenses for the discussion. The chapter illuminates synergies and offers critiques of both social theories, as they apply to exploring organisational learning and sustainability in communities of practice.

The first section of the chapter describes sociological perspectives on organisational change. It considers the role of social theory in understanding change as dynamic social interactions. It discusses theoretical views on the nature of organisations, change agency, structure and culture. The second section focuses on the Archerian (1995) morphogenetic approach to organisational analysis and understanding of the structure-agency relationship. The third section discusses how Habermasian (1984, 1987, 1996) theories of communication and deliberative democracy can be applied to develop agential learning capabilities and reflexivity to enable organisational change. The chapter ends by outlining the practical ontological and epistemological implications of exploring organisational learning and sustainability within Archerian and Habermasian theoretical frameworks.

3.2   The role of social theory in change

Understanding organisational change as dynamic processes of social change requires social theories that explain the interplay between agency and structure (Caldwell, 2006). Sociology and related areas such as social theory are useful in providing a critical and

reflective orientation to understanding organisational change (Hughes, 2006). This section provides such an orientation by highlighting the use of different social theories to explain organisational change[23]. I present theoretical views on the nature of organisations, change agency, structure and culture to further clarify the concept of morphogenetic relationships (see Section 1.5.4). Social theories of interest in this discussion are *strategic choice theory* (Child, 1972, 1997), Habermasian *communicative action* (1984, 1987) and Archerian (1995) *morphogenetic approach*. The next section examines how these theories may be drawn on to understand organisational change.

3.2.1 Drawing on different social theories

Engagement with the change management literature has revealed that there is no universal theory of organisational change and no simple established guidelines for understanding change (see Caldwell, 2006; Dunphy & Griffiths, 1994; Stacey, 2000). Furthermore, "as social reality is itself always shifting, no single theory of society has permanent value" (Dunphy & Griffiths, 1994, p. 2). Stacey (2000) argues that only partial explanations of organisational change can be provided by any one theory. Caldwell (2006) acknowledges that capturing the enormous complexity and potential scope of change and agency in organisations is a daunting task. For Caldwell, it is impossible to have adequate theories of organisational change, including theories of agency. However, he suggests that a robust theory of organisational change must simultaneously demonstrate how structure and agency are linked at levels of analysis, how change is produced and aspects of stability and instability in organisations are produced, and time must be included as a key historic factor. I agree with Child's (1997, p. 44) view that

> while different theoretical perspectives or paradigms may be irreconcilable in their own philosophical terms, when applied to the study of organisational phenomena they are not necessarily incommensurable.

Furthermore, I am certain that a complex and quickly changing reality, such the one I found at the NMK, cannot be investigated within the framework of a single theory, even if

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[23] Organisational change as applied in this study refers to social change processes in communities of practice. I also refer to such change processes as *morphogenetic* following Archer (1995). I use the terms interchangeably with more preference being given to *social change* in later chapters.

it is interdisciplinary in nature (Honneth, 1996). Writers such as Reed (1985, 1996), Alvesson (1987) and Ackroyd (1992), argue that belief in the incommensurability of paradigms severely limits the possibilities for theoretical development. They envisage the possibility of achieving greater theoretical synthesis using insights provided by different philosophical assumptions as sought in this research (see Section 1.4). To illustrate this point, I compare strategic choice theory (Child, 1997), the Archerian (1995), morphogenetic approach and Habermasian (1984) theory of communicative action approaches to organisational change (see Table 3.1).

Table 3.1   Three perspectives to organisational change

Key Feature	*Strategic choice perspective (Child)*	*Habermasian critical perspective*	*Archerian morphogenetic perspective*
1. *Basic metaphor*	Organisations as purposive competitors	Organisations as structures of communicative interactions	Organisations as *real* entities with emergent powers
2. *Intervention theory*	Organisational learning interventions based on negotiation and the exercise of choice	Organisational learning interventions are based on processes of critical reflection and collective actions	Organisational learning interventions are based on reflexive deliberations
3. *Ideal change state*	A highly efficient organisation meeting predetermined sustainability goals	An organisation where democratic principles and respect for all actors exist	An organisation that continuously responds to emergent factors that constrain sustainability change
4. *Analytic framework*	Analysis of internal and external environments to identify sustainability opportunities and issues	Analysis of situated communicative interactions to reveal prevailing power relations	Analysis of culture, structure and agency as distinct properties with emergent constraining and enabling powers
5. *Role of change agency*	A powerful change agency (corporate strategist) with technical expertise and degree of free choice	Change agency bestowed with communicative competencies	A deliberative change agency with reflexive powers to act on sustainability issues

Source: Adapted from Dunphy and Griffiths (1994, p. 26)

Table 3.1 compares and contrasts the three perspectives of organisational change on the basis of five key elements suggested by Dunphy and Griffiths (1994). These are the basic

metaphors of the nature of the organisation, their intervention theory, their model of the ideal organisation, the analytical framework for understanding change and the role of change agency. Although Table 3.1 is a highly summarised and inadequate comparison of the three social theories, it underscores the role of social theory in organisational change. It also supports Stacey's (2000) earlier argument that only partial explanations of organisational change can be provided by any one social theory (see also Dunphy & Griffiths, 1994). The comparison should not be read as an attempt to integrate the three social theories to understand organisational change. However, like Child (1997), I hold the view that harmonious aspects of different and competing social theories can be integrated and used in one study. This view has informed the use of both Archerian and Habermasian theoretical frameworks, as discussed later in Sections 3.3 and 3.4 (see also Section 1.4). Communicative interactions, as advanced in this study, have the potential to enhance reflexive deliberations and address the weaknesses of Archer's (1985, 1995) earlier work where reflexive agency was under-theorised. This study challenges strategic choice theory that is probably the dominant theory of strategy and organisational change (Stacey, 2000). Its voluntarist premises make up the prevailing approach to the implementation of the Museum in Change Programme introduced in Chapter 2 (see Section 2.3.2; see also Section 7.4). I highlight key features of the strategic choice theory to provide an orientation to its use in organisational change.

Strategic choice theory holds that the strategy of an organisation is the general direction in which it changes over time (Stacey, 2000). It is conceived on the premise that those with the power to make decisions for the organisation interact among themselves, with other organisational members and with external parties to make choices towards change (Child, 1997). This places a powerful *agency* and the *choices* made at the very centre of the theory. Campling and Michelson (1998, p. 582) define a strategic choice approach as

> a process of identifying, selecting and implementing the most effective means of securing long-term compatibility between the internal skills and resources of an organization and the competitive, economic, political and social environments within which an organization operates.

As a process, strategic choice points to the possibility of a continuing adaptive learning cycle that locates organisational learning and sustainability within the context of organisations as socio-political systems (Child, 1997). It therefore, articulates a political process of free choice in enabling organisational change that brings agency and structure into tension and locates them within a significant context (*ibid*.). In this way, strategic choice theory regards both the relation of agency to structure and to environment as dynamic in nature, but privileges free-choice agency. Three key issues arise from a strategic choice analysis of organisational change (see Child, 1997 for details). First, a strategic choice perspective identifies *action determinism*[24], internal organisational politics and informational deficiencies as constraints to agency and choice. Second, it views the environment as consisting of other actors in other organisations or among the public. When making the strategic choices available to actors for social change, such dimensions are usually considered as threats and opportunities that the environment presents. Third, strategic choice analysis recognises that organisations and environments are mutually pervasive, with actors creating free choice possibilities through their relationships with those outside the organisation. This was true for the relationships between the NMK and EU in the implementation of the Museum in Change Programme (see Sections 2.3.2 and 7.2.2).

Within a strategic choice perspective, the NMK operated under certain external and internal constraints in the context of enabling social change processes within the Museum in Change Programme. Such constraints may shape the nature of responses to sustainability issues but they do not determine which alternative is selected. The ultimate choice rests on a powerful change agency (corporate strategist) with technical expertise and a degree of free choice (Dunphy & Griffiths, 1994). In other words, actors at the NMK have the capability to exercise a degree of free choice over the way to implement social change processes. This grants the actor absolute autonomy in an organisational change process by dissolving structural constraints. Critical realism that underpins this study establishes agency not by denying the social structural but by insisting upon it (Bhaskar, 1978). Its

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[24] The notion of *action determinism* refers to the possibility that actions to implement organisational change are selected according to in-built preference and information processing systems (Whittington, 1988). It holds that, given certain types of drive, such as an over-riding intention to improve sustainability practices, a decision-maker will only select one kind of action.

emancipatory goal is based on the premise that structures are transformable through the intentional exercise of human agency (Bhaskar, 1986). Critical realism does not take agency for granted, but rather engages in its extension. By exposing the structural inequalities that inhibit them, it aids actors in the structural transformations by which they make themselves free (Whittington, 1988). Archer (1995) critiques theories of strategic choice for their false assumptions of upwards conflation and voluntarism. Whittington (1988, p. 522) argues that

> In dissolving away constraints upon action, many voluntaristic authors also dissolve preconditions. And in focusing upon external threats, they sometimes neglect to secure sufficient capacities for agency within the actors themselves.

A voluntaristic approach to organisational change as implied above relies too heavily on rationality, and does not take account of other causal factors that shape social change and agency (Archer, 2000). This study challenged rationalistic approaches to organisational change which, rely on a powerful change agency with degrees of choice (see also Section 5.3.3). It sought to develop agential learning capacity and reflexivity for acting upon contextual issues towards enabling organisational learning and sustainability at the NMK.

The next sections present theoretical perspectives on the nature of organisations, change agency, structure and culture to provide further orientation to understand social change.

3.2.2 *Views on the nature of organisations*

A number of views on the nature of organisations exist in organisational studies literature (see Stacey, 2000). These views, which are rooted in different sociological perspectives, determine how change processes in organisations may be theorised. For example, complexity theorists such as Stacey (2000) understand organisations as complex responsive processes that are conversational in nature, forming and being formed by power relations. From a strategic choice perspective, organisations are perceived as patterns of communications, relations and processes for making and implementing decisions amongst groups of human agents (Child, 1997). For Habermas (1987), organisations are understood as structures of communicative interaction where social action is enabled or constrained by prevailing power relations. From a systems theory perspective, Doppelt (2003) views

organisations as complex social systems whose performance is the product of the interaction of their parts (see also Kanter *et al.*, 1992).

Based on Archerian social realism, introduced in Chapter 1 (see Section 1.4.1; see also Willmott, 2000), I view organisations as emergent strata of social reality dependent on, but irreducible to human agency. Within this framing, I regard the NMK as a product of agential interactions with properties and powers that are both irreducible to, and independent of employees' awareness. Understanding organisational change at the NMK therefore, necessitates analysing morphogenetic relationships as reported in Chapter 7 (see Sections 7.2.2) and discussed in Chapter 9 (see Section 9.2).

3.2.3 Change agency

Understanding agency is at the heart of organisational change and social theorising. According to Fullan (1993), agency entails self-consciousness about the nature of change and the change process. Buckley (1967, p. 95) conceptualises agency as possessing "degrees of freedom, selectivity, or innovation mediating between external influences and overt behaviour". Giddens (1984) theorises change agency as the transformative capacity of actors to mediate in a series of events so as to change their course. Thus, actors have power to act on sustainability issues and cause change in organisations through the use of their reflexive knowledge. Archer (2003) theorises change agency as the creative role of persons and the capacity to choose to use their emergent powers of reflexivity to pursue projects in the context of durable and objective social properties (see also Section 3.3.5). For Habermas (1984), human agents have communicative competence that allows them the freedom to jointly act on sustainability goals. This study regards agency as the capacity of *actors* to consciously choose to use their knowledge, skills, communicative or reflexive powers to either enable or constrain organisational learning and sustainability (Archer, 2003; Caldwell, 2006; Giddens, 1976; Habermas, 1987).

Archer (1995) establishes a distinction between *agents* understood as collectivities with similar life chances, *actors* understood as individual persons filling their given roles and *persons* understood as people with a person and social self. Regarding agents, she further distinguishes between corporate agents that have power and influence and primary agents

that lack such power and influence. The development of a particular kind of agent, both primary and collective, is emergent and embedded within concrete historical circumstances (Clegg, 2006). In *Being Human* (2000, p. 87), Archer qualifies this claim when she argues

> The properties and powers of the human being are neither seen as *pregiven*, nor as *socially appropriated*, but rather these are emergent from our relations with our environment. As such they have relative autonomy from biology and society alike, and causal powers to modify both of them.

She has formulated the concept of and explained the key role of the *internal conversation* as a central mechanism in determining our being in the world. The internal conversation (reflexive deliberation) is how our personal emergent powers are exercised on and in organisations (Mutch, 2004). This theory would propose that such reflexive deliberations are at the core of the interaction between agency and structure during organisational change processes. For Archer (2003, p. 9), internal conversation is "the modality through which reflexivity towards self, society and the relationship between them is exercised". She puts forward three forms of reflexivity: *communicative* reflexivity, *autonomous* reflexivity and *meta* reflexivity.

Based on Archer's (2003) theory of three forms of reflexivity, it might be possible to observe different forms of reflexivity in organisational change processes related to sustainability. Communicative reflexives are actors in organisations who need others to complete internal conversations. In the context of sustainability and organisational change, they would thus depend on others to enable or carry forward processes of organisational change and sustainability in which they can participate. Autonomous reflexives are more likely to shut themselves off from others in the completion of their internal conversations and *come up with solutions* or display strategic approaches to organisational change and sustainability. Meta reflexives are actors who are likely to monitor their reflexivity (their own thoughts and actions) against strongly held sustainability values and are likely to be more critical towards social relations that constrain change. A key element of communicative interactions, as advanced by this research, is fostering critical reflection in a community of practice to develop learning capabilities, i.e. enhance or strengthen the

reflexivity[25] of actors to enable change (see Sections 4.2.2 and 9.4.3). However, it is important to be aware that developing learning capabilities within communities of practice is influenced by concerns such as the state of well-being of the actors, their performative competence and their self worth (Archer, 2003). I identified such concerns as contextually mediated and interacting issues of internal communication and information flow, decision-making and leadership, staff motivation and development, the identity and role of the NMK and financial management (see Chapter 8).

3.2.4 *Structure as an emergent stratum of reality*

The concept of *social structure* is ever-present in the sociological literature and its meaning is foundational for theorising social change (Hays, 1994). However, the ontological status that one accords structure is hotly contested (Willmott, 1997). Many organisational theorists view structure as not ontologically distinct from agency (e.g. Bresnen *et al.*, 2005). This view is based on Giddens's (1984) theory of *structuration*[26] that I draw on to provide a starting point for conceptualising structure.

According to Giddens' (1999), the basic domain of social science study is neither the experience of the individual, nor the existence of any form of societal totality, but social practices. Giddens (1984, p. 157) draws a distinction between *systems* as reproduced social relations and *structures* as rules and resources that actors use. He argues that *social systems* do not have fixed structures, and that structures have no reality other than as instantiated social practices. However, this leads to what Willmott (2000, p. 103) calls "an ontologically depthless account of social reality confined to the middle element of the analytical sequence". Archer (1995) terms it *central conflation* since structure and system constitute each other (see Willmott, 1999; 2000). This makes it impossible to analyse change

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[25] Although Archerian reflexivity and Habermasian processes of communicative action are linked (see Section 3.4.2), they are not the same thing. Archer's view is a more refined way of thinking about why the communicative interaction is needed in communities of practice. Participant learning capabilities are visible in enhanced reflexivity. This study places reflexivity at the heart of social change processes related to organisational learning and sustainability.

[26] Structuration refers to both the temporal processes of *producing – reproducing* structures and the epistemological identification of agency and structure (Giddens, 1990). Giddens's structuration theory has been critiqued by Caldwell (2006) and Archer (1995) for dissolving the dualism of agency and structure by collapsing structure as system, into structure as temporal processes of agential interaction or practice.

processes "as the world is only instantiated in the actions of the present" (Clegg, 2005, p. 317). Archer requires us to be more analytically rigorous about how we observe and understand structure-agency and culture-agency relationships as discussed later in Section 3.3.

Based on Archerian social realism, I conceptualise structure as a distinct emergent stratum of social reality with relatively independent causal properties that emerge out of human activity over time (Archer, 1995). This implies that structural emergent properties are only possible because of human activity, but once they have emerged by virtue of their "*internal necessity* they possess irreducible causal powers" (Willmott, 1997, p. 104). For instance, within the NMK individual actors reproduce new social relations through their daily activities. These social relations together with their associated resources, constraints or rules influence what happens in terms of enabling organisational change. Positions at the organisation are filled with actors whose subsequent capabilities to address sustainability issues reside in the existing network of social relations. In other words, the roles and positions of actors at the NMK are internally related such that what one person can do to enable change depends on their relation to others. The extent to which actors can enable change depends on their structural location in the organisation. For example, the NMK Directors had certain powers at their disposal to enable change that the research participants did not have. Nevertheless, such powers may remain unexercised or exercised but unperceived. To reiterate, the power to enable organisational learning and sustainability at the NMK exists in virtue of the irreducible social relations that constitute the organisation. The defining feature of structure is therefore, its *internal relationality* (Willmott, 1999).

Following Lockwood's (1964) distinction between *social* and *system* integration highlighted in Chapter 1 (see Section 1.4.1), this study disengages analytically the emergent powers of people from those of the *parts*, i.e. social structure. This is useful in understanding how structural emergent properties *condition* social interactions by supplying actors with reasons for pursuing stability or change (Archer, 1995). Roles, rules and procedures, responsibilities and resources that occur at the NMK are some of the structural properties that supply actors with reasons for pursuing change or stability in the context of achieving sustainability (see Section 7.2). However, these structural emergent

properties have to be *mediated* by agents using their reflexive capabilities to have any causal effectiveness with regard to enabling organisational change and sustainability.

3.2.5 Conceptualising culture as an emergent stratum of reality

The challenges inherent in conceptualising culture are aptly captured by Grint (1995, p. 162) when he equates the concept to a black hole: "the closer you get to it the less light is thrown upon the topic and the less chance you have of surviving the experience". Even with a long history in anthropology and sociology, the concept of culture that entered the field of organisational studies in the early 1970s still remains poorly defined (Hughes, 2006; Palmer & Hardy, 2000). Archer (1985, p. 333) asserts that "what culture is and what culture does are subjects of conceptual confusion throughout social theory".

Nonetheless, a wide range of definitions of culture do exist in management and sociological literature (see Palmer and Hardy, 2000 for examples). Some of the definitions focus on beliefs and values (e.g. Cook & Yanow, 1993; Yanow, 2003), while others highlight shared meanings (e.g. Smircich, 1983; Wilkins, 1983). A widely used definition in management literature is that of Schein (2004). He describes culture as a "pattern of shared, basic taken-for-granted assumptions" that becomes evident in an organisation's systems (*ibid.,* p. 36). However, this definition is "unitarist" in orientation as it implies that an organisation has a uniform and stable culture (Palmer & Hardy, 2000, p. 117). According to Willmott (1997), contemporary sociological and anthropological theory wrongly conceive culture as consistent and coherent (Willmott, 1997, 2000). For Archer (1985), conceiving culture as 'shared meanings' means eliding members of the organisation with the meanings. It entails what Willmott (2000, p. 106) terms as "epistemic fallacy". In this fallacy, assertions of *being* are reduced to those of *knowing*.

For critical educators such as Giroux (1988, 2003) and McLaren (2003) culture is a form of production whose processes are connected with the structuring of different social formation in organisations. Kincheloe and McLaren (2003) regard cultural production as a form of education as it generates knowledge, shapes values and constructs identity. Culture therefore, plays an essential role in enabling or constraining organisational change and sustainability. Pierre Bourdieu's (1977, 1990) critical sociology has contributed centrally to

the notion of cultural reproduction as an essential analytic category in social theory and organisational studies (see Webb *et al.*, 2002). Although I have found Bourdieu's work and that of critical educators such as Giroux (2003) useful in conceptualising culture, some limitations are evident. Viewing culture as a form of reproduction has the danger of reducing organisations to *ideology*[27] machines. It also narrows possibilities of engaging with a pluralist and diverse range of complex interacting cultural factors that enable and constrain organisational change. Furthermore, seeing culture only in terms of its production distorts the nature of social reality as it contributes to what Archer (1985, p. 333) calls the "the myth of cultural integration". In this myth, orderly or contradictory relations between ideas are conflated with orderly or contradictory relations between people (*ibid*.). Reconceptualising culture within Archerian social realism addresses this limitation.

This study therefore conceives culture as a distinct emergent stratum of reality pertaining to relationships between *ideas* and their role in agential interactions (Archer, 1985). As an emergent stratum of reality with causal powers, culture conditions agential capabilities to enable or constrain organisational change. This conceptualisation requires us to make a parallel distinction between *cultural system integration* and *socio-cultural integration* following Lockwood's (1964) distinction between social and system integration highlighted in Chapter 1 (see Section 1.4.1). Basically, cultural system integration refers to the emergent relations between the components of culture in an organisation (Willmott, 2000). It is analysed in terms of what Archer (1985) refers to as *logical consistency*, that is, the degree of consistency between the component parts of culture. Such components are anchored in ideational elements such as beliefs, norms, values, knowledge, language, etc. of an organisation. On the other hand, socio-cultural integration refers to the relationships between people (Willmott, 2000). This is conceptualised in terms of *causal consensus* (Archer, 1985); that is, the degree of cultural uniformity produced by the imposition of ideas by one set of people on another. This may be through legitimation, persuasion or dialogue as explained in Habermasian theory of communicative action (see Section 3.4.2).

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[27] The term *ideology* has many meanings (Foley, 1999). Brookfield (2000) view ideology as a set of cultural practices. Ideology in this sense is an active process that holds an organisation together through shared frameworks of meanings and values. On the other hand, ideology can also be a means of domination, of what Gramsci (1971, p. 12-13) called "hegemony". In this latter sense ideology reflects, constructs and reproduces the power and interest of dominant groups in an organisation (Darder *et al.*, 2003).

Therefore, the issue of power that is explored in Sections 5.4, 7.2.1 and 7.4.2 becomes obvious during socio-cultural integration.

Cultural emergent properties, like structural ones occur independently of human conception (Willmott, 1997). However, unlike structural properties, the existence of emergent cultural properties is not dependent upon the continued reproductive actions of human agency. For example, beliefs at the NMK such as *being a renowned heritage conservation organisation* (NMK, 2005) are emergent from research activity, but occur independent of the researchers. However, this belief or knowledge about heritage conservation at the NMK will continue to exist even when researchers die or research activities that created the knowledge cease. This is to confirm the *objective*[28] existence of emergent cultural properties in organisations. The argument that emergent cultural properties have objective existence is rooted in the philosophy of Karl Popper (1979), which Archer (1995) has drawn upon when conceptualising culture.

Popper (1979) distinguishes three worlds: world one refers to *physical* states and processes, world two refers to *mental* states and process and world three refers to *products* of human minds. Such products include paintings, sculpture and art. However, Popper is concerned more with *objective knowledge*, namely, theories, arguments, hypotheses, unsolved problems. For Popper (*ibid.,* p. 109), "knowledge in the objective sense is *knowledge without a knowing knower: it is knowledge without a knowing subject"*. Thus, the third world consists of ideas in the objective sense, as they appear in books and other accessible sources like the NMK research collections. These sources have objective existence and are possible objects for human thought. It is this objective world that Archer (1985, 1995) conceives of as the cultural system. The cultural system is objective and has independent relations among its components that include theories, beliefs, values and arguments (Willmott, 2000).

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[28] The use of the term *objective* here is not meant to express a claim about truth or falsity but is instead about the relation between knowledge and the human agents who produce it (Layder, 1997; Sayer, 1992). Moreover, *objective* should not be taken to imply that emergent cultural properties are static and outside the grip of human intervention.

From the foregoing discussion, the practical social theorist can theorise about the various interactions between the cultural system and the socio-cultural integration on a multi-level basis. The distinction between cultural system and socio-cultural integration makes it practical to analyse and explain how existing beliefs, values and ideas at the NMK may enable or constrain organisational change and sustainability (see Section 9.2). It also makes it possible to analyse and explain the cultural effects of introducing new ideas, values, practices and beliefs related to organisational change and sustainability to the organisation (see Chapter 8). The Archerian (1995) morphogenetic approach that I examine next provides a coherent theoretical framework to undertake such analysis.

3.3   Archerian morphogenetic approach to organisational analysis

As argued already, I have found the work of the English sociologist, Margaret Archer, useful in analysing and explaining organisational change. Archer's (1995, 1996, 2000, 2003) contribution to sociological theory has been through her works on social realism as introduced in Chapter 1 (see Section 1.4.1). This section of the chapter discusses her morphogenetic approach to organisational analysis in detail. I first highlight the origins and cyclical phases of morphogenesis. I then explain how structural, cultural and agential changes can be understood within cyclical phases of morphogenesis. Finally, I point out some critiques of the Archerian morphogenetic approach.

3.3.1 Origins and phases of morphogenesis

The *morphogenetic approach* explains conditions that tend to enable change or maintain the status quo in a social system such as an organisation. Archer derived the principle of morphogenesis from Walter Buckley's (1967) systems theory. This theory grew out of disillusionment with the application of organic, mechanical and simple cybernetic systems theories to the social sphere (Willmott, 2000; see also Section 1.5.6). The development of morphogenesis by Buckley (1967) was aimed at emphasising that social systems are *human* establishments, they are *open* and hence cannot be modelled on any mechanical systems analogue. A number of theoretical elements from general systems theory inspired Archer to develop her morphogenetic approach (Zeuner, 1999). These are the idea of variety generated by the system itself, the idea of tensions in the system and the idea of

transactional processes of exchange, negotiation or bargaining (see also Section 1.5.6). As mentioned in Chapter 1 (see Section 1.4.1), Archer (1996) elaborated the principle of emergence under the influence of the philosophy of Roy Bhaskar (1993). Bhaskar (*ibid.*) developed the idea that a context consisting of contradictions within and between differentiated and stratified entities constitutes the basis of emergence. Thus, on the basis of one term arises out of the other. Action leading to this development must, however, take its point of departure in reflexivity and judgement. In this way, Archer (1996) bases the expansion of morphogenesis on Bhaskar's philosophy of development.

When exploring organisational learning and sustainability within a specific context, it is possible to look through time at the processes of change and explain how morphogenesis and morphostasis occur (Archer, 1995). According to Archer (1995), morphogenesis has a cycle that entails three phases: structural or cultural conditioning, social or socio-cultural interaction and social or cultural elaboration. This three-part cycle can be employed to theorise organisational change and sustainability within a specific setting (e.g. Lotz-Sisitka & Lupele, 2006). The cycle corresponds to the three broad cycles of inquiry examined later in Chapter 6 (see Sections 6.3, 6.4 and 6.5). As shown in Chapter 6, morphogenetic analysis of organisational learning and sustainability, proceeds sequentially by identifying pre-existing contextual factors (structural and cultural conditioning), exploring the consequences of enacting environmental education processes (social and socio-cultural interaction) and delineating the subsequent learning and sustainability outcomes (social or cultural elaboration). I will explain these phases further.

1. *Structural or cultural conditioning*
    During this phase, actors are influenced (conditioned) by, but never determined by, structural and cultural factors operating in an organisation. In other words, structural and cultural emergent properties *condition* agential interaction by providing actors with reasons for pursuing change or maintaining stability (Willmott, 1997). Contextual issues identified in Chapter 7 (see Section 7.2) and explained in Chapter 8 are examples of structural and cultural factors that conditioned agential learning capabilities in enabling organisational change and sustainability at the NMK. Identification of such issues entails a critical organisational analysis to determine

factors that pre-exist to condition agential learning capability to address sustainability issues in communities of practice (see Sections 6.3.3 and 7.2).

2. *Social or socio-cultural interaction*

    Social or socio-cultural *interaction* occurs when actors intervene to act on structural and cultural factors that condition agential learning capability to enable social change. For this study, communicative interactions are the environmental education processes aimed at developing participant learning capabilities and reflexivity to address sustainability issues in a community of practice (see Section 1.5.1). This phase corresponds to the second cycle of inquiry that is reported in Chapter 6 (see Section 6.4.2). Implementing communicative interactions as processes of social or socio-cultural interaction can either lead to change (morphogenesis) or stability (morphostasis) in achieving sustainability in an organisation. Through communicative interactions, the research sought to deliberate and act on sustainability issues to achieve organisational change at the NMK (see Section 8.4).

3. *Social or cultural elaboration*

    Morphogenesis results in a process of social or cultural elaboration that in turn provides possibilities for further cycles of social action. Delineating subsequent social or cultural elaboration is the focus of the third cycle of inquiry in this study that also explores how to institutionalise social change processes and the emergence of sustainability in an organisation (see Chapter 8).

Archer maintains that structure, culture and agency must be analysed as morphogenetic cycles. The next sections consider how structural, cultural and agential changes can be analysed and explained as morphogenetic cycles.

3.3.2 Structural morphogenesis

In Section 3.2.4 I argued that structures are products of agential relations, but that they possess properties and powers that are both irreducible to, and independent of agential awareness. This research sought to identify structural properties and powers that pre-existed at the NMK to provide actors with reasons for pursuing change or maintaining

status quo (see Section 7.2). Such identification is based on Archer's premise that actors' reflexive capabilities to enable or constrain organisational change are conditioned by structural factors that pre-exist in a specific context. Chapter 2 provides examples of such factors within the broader Kenyan context (see Section 2.2).

Based on Archerian three-part morphogenetic cycles (see previous section), the starting point of structural morphogenesis is structural conditioning. This entails a form of historical analysis to identify structural factors that pre-exist in an organisation to both enable and constrain change (see Sections 7.2 and 9.2). Given that such structural factors rest centrally on human activity, it is important to analytically separate relational properties of people from those of the *parts*, i.e. social structure to allow for *analytical dualism* that constitutes Archer's methodological strategy (see Sections 1.4.1 and 7.2.2). Understanding structural dynamics as contradictions and complementarities between relations pertaining to parts (systemic) and those of people, is essential to enabling structural change or stability (Willmott, 2000). Contradictions or systemic strains will create problematic situations for structural change agents, while complementarities will create easy situations (Archer, 1996). In this way, the social system creates what Archer calls a *situational logic* for change agents (Zeuner, 1999). The interaction between emergent structural properties and agents (social interactions) determine whether structural morphogenesis or morphostasis takes places.

During the phase of social interaction, actors use their reflexive capabilities to intervene in emergent structural properties in creative and non-deterministic ways (Willmott, 2000). This research utilises communicative interactions to strengthen participant learning capabilities and reflexivity to address emergent structural properties that constrain organisational change at the NMK (see Chapter 8). Such structural properties include roles, rules and procedures, responsibilities and resources within an organisation (see Section 3.2.4). Social interactions that emerge from environmental education processes may either lead to structural elaboration or morphostasis. This is because social interactions are characterised by systemic incompatibilities or complementarities that causally condition agential learning capability. For this study, systemic incompatibilities occur when those actors with vested interests prevent new social relations that reflect sustainability principles

from taking root in an organisation (see Section 8.5.3). The process of structural elaboration provides the opening conditions for further cycles of social action.

3.3.3 Cultural morphogenesis

For critical theorists, cultural analysis provides a starting point for understanding how dominant ideologies and power relations are constituted and mediated through specific cultural practices within organisations (McLaren, 2003). Cultural analysis within a critical perspective entails making aspects of cultural practices problematic, to understand the root causes of sustainability in organisations. Although a critical theory approach is a key part of organisational analysis in this study (see Section 7.2.1), it does not exhaust all possibilities of seeking and explaining change processes in the context of sustainability. I have found its emphasis on dominant power relations and ideologies to some extent limiting. See Chapter 5 for details on critiques of critical theory (see Section 5.2.4). A morphogenetic approach, as outlined here provides a deeper understanding of cultural dynamics that operate in an organisation such as the NMK.

Following the three phases of the morphogenetic cycle, the starting point of cultural morphogenesis is cultural conditioning (see Section 9.2.1). This is understood as the ideas, beliefs or knowledge that at any given time, have holders (Archer, 1995). In Section 3.2.5 I explained that components of culture are anchored in ideational elements such as basic assumptions, beliefs, values, knowledge, and even the language of an organisation. I made an analytical distinction between the cultural system (*parts*) and socio-cultural interaction (*people*) to respectively refer to relations between components of culture, and their relationships with people. For example, research scientists at the NMK are holders of scientific ideas on Kenyan heritage, but those ideas continue to exist even when researchers die or the research activities that created them cease. In any organisational change context, there exists both contradictions and complementarities between relations pertaining to parts (systemic) and those of people (Archer, 1996, Willmott, 2000). According to Archer (1985, 1996), contradictions will create problematic situations for cultural change agents, while complementarities will create easy situations. In this way, the cultural system creates what Archer calls a *situational logic* for cultural change agents (Zeuner, 1999). However, cultural conditions cannot themselves determine whether cultural change can take place.

This requires interaction between the cultural domain and agents (socio-cultural interactions).

The phase of socio-cultural interaction is characterised by attempts to protect or increase power relations in an organisation (Archer, 1985; see Section 7.4 and 9.2.2). If the distribution of power at the NMK is such that any attempt at cultural change is suppressed, then it does not matter whether its cultural domain has ideas that are inconsistent with sustainability and that demand urgent change. It also does not matter if the cultural domain at the NMK has ideas consistent with sustainability that offer opportunities for adding new elements, if the holders of power use all means to prevent this. As Archer (1985, p. 337) argues

> Power relations are the causal element in cultural consensus building and, far from unproblematically guaranteeing behavioural conformity; they can provoke anything from ritualistic acceptance to outright rejection of the culture imposed.

Therefore, the use of power and the escape from power are critical in determining cultural change at the NMK. Power relations influence whether communicative interactions may lead to morphogenesis or morphostasis (see Section 5.2.2 for discussion on power relations). Archer (1996) argues that it is possible under well-organised socio-cultural conditions, to hold back cultural changes for months or even decades, but in the in the long-run it becomes impossible. Situations can arise where holders of ideas (e.g. researchers at the NMK) are forced to accept new ideas (e.g. new environmental policies) in order to sustain their positions. This then makes cultural elaboration, the third phase of the morphogenetic cycle a reality (see Sections 8.2.3 and 9.2.3).

As stated earlier, introducing sustainability ideas, such as social justice, through communicative interactions to enable cultural change may create a situational logic for change agents (see for example Sections 8.2.3). If the new ideas are consistent with those that already exist in an organisation, socio-cultural interaction readily assimilates them and change is not a problem. However, if the new ideas on sustainability contradict existing ones, cultural change becomes difficult. Archer suggests three possible socio-cultural consequences of contradictions that may take place within the cultural domain as

adaptation, *modification* and *elaboration*. In adaptation, new ideas on organisational learning and sustainability are adapted to fit with the existing ones in the organisation. This leads to morphostasis or stability. Modification is where existing ideas on sustainability are modified to fit with the new ones that are introduced through communicative interactions to generate a form of morphogenesis. In elaboration both new and old ideas on sustainability are modified to remove or minimise contradictions. Morphogenesis takes place, and socio-cultural interaction leads to cultural elaboration and the generation of new ideas on sustainability. The next section examines morphogenesis of agency.

3.3.4 Morphogenesis of agency

According to Archer (1995), morphogenesis of agency can occur in three ways: when structural and cultural changes as explained in the previous sections, also lead to agential change, when primary agents become corporate agents and after agents regroup into actors. As I mentioned earlier, Archer (1995) has made a distinction between agents, actors and persons (see Section 3.2.3). At the NMK, *agents* would be all employees with similar professional development opportunities. The same employees become *persons* when understood as people with a person and social self (personality). But once they occupy given roles, they assume the status of *actors*. For example, my role as the action researcher in this study meets the criterion of an actor. Based on influence, agents are further differentiated into corporate and primary agents. Corporate agents such as the Directors at the NMK have power and influence to enable organisational change in the context of environmental education and sustainability. Primary agents such junior staff lack such power and influence. As long as the Directors (elite) keep their distance from the junior staff (primary agents), no change and sustainability at the NMK can take place, i.e. there is morphostasis. However, when primary agents organise to become corporate agents, regrouping occurs. Formation of a research team that became a *community of practice* (Wenger, 1998; see Section 6.3.1) at the NMK provides an example of such regrouping. Regrouping of primary agents therefore leads to morphogenesis of corporate agents. In addition, morphogenesis of actors occurs when agents regroup, leading to elaboration of roles. This in turn leads to an increase of the number of roles attributable to persons as witnessed in agential changes resulting from the Museum in Change Programme (see Section 8.3.1).

The next section points out some of the critiques of the Archerian morphogenetic approach to organisational analysis.

3.3.5 Critiques of Archerian morphogenetic approach

Change and, subsequently, time is of central importance to critical realism (Bate, 1994). However, not enough has been written on the conceptualisation of time and temporality from a critical realist perspective (*ibid.*). It is against this backdrop that Bate critiques Archerian morphogenetic approach for employing an ontological dualism of cyclical and linear temporalities similar to that contained within Giddens's (1984) structuration theory[29]. Bates (2006, p. 147) asserts that

> by employing morphogenesis and morphostasis, Archer is unable to provide [complex] concepts with which to explain change. Rather, they merely describe change by allowing the comparison of different historical periods.

Like Hay (2002), Bate (2006) criticises Archer for using different temporal domains for structure and agency, thereby reifying and ontologising an analytical dualism. Kivinen and Piiroinen (2006, p. 226) also criticise Archer for "ontologising time so that the actions of people in the past, described as individual actions while happening, become irreducibly structural once they have receded into history". As a result, Archer is unable to escape philosophical dualism and the ontological independence of structure and agency (Bate, 2006). Bate goes on to say that the morphogenetic cycle's framework, with agency only being injected at its mid-point, results in a structuralist bias. For Hay (2002, p. 148) the morphogenetic approach "implies a residual structuralism only punctuated periodically yet infrequently by a largely unexplained conception of agency". However, Hay's comment was produced before Archer's (2003) more recent work in which she explains agency through the theory of reflexive deliberations. To be able to overcome philosophical dualism and explain change in a persuasive manner, Bate (2006) suggests adoption of Adam's (1990) notion of *circadian* time. This conceptualisation views the passing of time as asymmetrical repetition with change being seen as rhythmical.

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[29] According to Bate (2006), while Archer employs a dualism of *stasis* and *genesis*, Giddens employs a dualism of *reversible* and *irreversible* time. Consequently, there is a theoretical paradox at the heart of Giddens's conceptualisation of time where an actor exists both in reversible and irreversible time.

In the introduction to this chapter I stated that Habermasian (1984, 1987, 1996) theories of communication and deliberative democracy offer a suitable framework for developing agential learning capabilities and reflexivity to enable organisational change (see also Section 1.4.2). I find synergies between the Archerian work, as discussed above, with Habermasian critical theory which is discussed below. Both Archer and Habermas are committed to emancipatory projects that involve strengthening agential reflexive learning capabilities. They both draw on pragmatism and have been inspired by the philosophy of Karl Popper (1979). The relatively open stance that critical realism, as a philosophy of social sciences has towards epistemology (Sayer, 2000) justifies further, the utilisation of Habermasian critical theories as examined in the next sections.

3.4   Habermasian theories of communicative action and deliberative democracy

One of the aims of this research is to explore ways of knowing the social reality of organisational learning and sustainability within a specific context (see Section 1.3.1). Following Deweyan pragmatism (see Section 1.4.2), exploring ways of knowing incorporates agential understanding of contexts and processes of collective action. I ground ways of knowing reality of organisational change in *intersubjective* or social learning processes of identifying and acting on sustainability issues (see Sections 6.3 and 7.2). For Habermas (1984, 1987, 1996) all processes of knowing need to be subjected to critique (see Sections 5.2.2 and 5.2.3). This entails undertaking critical organisational analysis and social learning process using communicative interactions as environmental education processes (see Section 1.5.1). In communicative interactions, social learning goals are jointly decided on through a process of communication that recognises democratic principles and respect for all participants (Habermas, 1984).

This section draws on Habermasian theories of communicative action and deliberative democracy to provide epistemological perspectives for the study. I first make explicit links between Habermasian critical theory and the Archerian morphogenetic approach, as they relate to this study. I discuss three interrelated dynamics of Habermasian theory of communicative action and their relevance in the exploration of organisational learning and

sustainability. These dynamics are the lifeworld, social action and communicative interactions. I then examine Habermasian (1996) theory of deliberative democracy and how it relates to social learning processes in communities of practice. Finally, I highlight critiques of the two Habermasian theories put forward here.

3.4.1 Grounding knowledge in human experiences

It is important to make some explicit links between the Archerian morphogenetic approach and Habermasian critical theory to justify their use in one study (see also Section 1.5). As stated above (see also Section 1.4.1), critical realism, as a philosophy of social sciences, has a relatively open stance towards epistemology (Sayer, 2000). Morrow and Brown (1994, p. 77) argue that critical realism can make a strong case as a basis for securing the status of critical theory in relation to the sciences. This is because critical realism acknowledges the subjectivist point that epistemology cannot be based on some pure scientific method founded on empirical data (see Sayer, 2000). Another justification is that both Archer and Habermas have been influenced by the philosophy of Karl Popper (1979) that distinguishes three worlds.

According to Popper (1979), world one refers to *physical* states and processes (the objective), world two refers to *mental* states and process (the social) and world three refers to *products* of human minds (the subjective). In Section 3.2.5 I explained that Archer conceives world three as the cultural domain that comprises ideational components such as theories, beliefs, values and arguments (Willmott, 2000). For Habermas (1984), world three (the *subjective* sphere) is about feelings, intentions and states of awareness of actors in an organisation. It is characterised by the principle of privileged access. This sphere is made accessible when an actor meets *the others* as in environmental education processes aimed at addressing sustainability issues (see Chapter 8). From this perspective, knowing the social reality of organisational learning and sustainability occurs when actors, within an organisational setting, surface their *experiences* through argumentation[30] (Eriksen & Weigård, 2003). In short, knowing is "grounded in processes of intersubjective

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[30] The mode of argumentation implied here is based on the principle of *fallibilism*, that is, the notion stressed by Karl Popper (1979) that science is an endless process of "conjectures and refutations" rather than absolute evidence and verifications (Morrow & Torres, 2002, p. 47).

communicative action" (Morrow & Torres, 2002, p. 48; see Habermas, 1978 for earlier epistemological contributions). The next section elaborates further on this assertion by discussing the Habermasian (1984, 1987) theory of communicative action.

3.4.2 *The theory of communicative action*

This theory of communicative action focuses on the complexity and significance of what is achieved in everyday communicative action in contemporary life (Habermas, 1984). Habermas draws on linguistic pragmatism and speech act theory to discard the vocabulary of objectification in favour of communicative interactions of knowing subjects (Eriksen & Weigård, 2003). Authors such as Mezirow (1991) and Parkin (1996) consider the Habermasian theory of communicative action as a major contribution to contemporary social theory. For me, it offers a suitable epistemological lens for exploring the complex reality of enabling organisational change within a specific context. Central to this theory is the argument that acting subjects, through language, are part of a mutual process of understanding aimed at social (collaborative) action. In this research, communicative action occurs when participants communicate with each other to arrive at an understanding towards addressing sustainability issues, as reported in Chapters 7 and 8. I derive three interrelated elements from the theory of communicative action that I find relevant to this study. These are *communicative interaction, social action* and *lifeworld*. Firstly, I examine the element of communicative interaction that forms the basis of environmental education processes in this study.

At the heart of the theory of communicative action is the concept of "communicative interaction" (Forester, 1983, p. 236) that can be used to link social learning processes to their structural and cultural settings (lifeworld). As introduced in Chapter 1 (see Section 1.5.1), I have used this concept to synthesise ideas from critical pedagogy and critical action research processes towards developing agential learning capabilities and reflexivity for addressing sustainability issues. Habermasian (1984) theory of communicative action provides some insight into what is involved within concrete situations of interaction. At the NMK, communicative interactions worked to either maintain or change social relations and ideas related to sustainability.

Social action is the second element that forms the basis of the theory of communicative action (see also Section 4.4.1). According to Heath (2001), the Habermasian theory of communicative action is a good attempt to produce a general theory of social action. The concept of *social* action that entails numerous actors is derived from the basic model of the solitary actor (Eriksen & Weigård, 2003). Weber (1978) argues that action should be understood as all human behaviour to which the individual attaches *subjective meaning*. Habermas (1984) argues that social action is either strategic or communicative. Whereas strategic action is oriented to success, communicative action is oriented to reaching understanding. In strategic action, the goals of social action are predefined and actors are treated as *objects* to accomplish them. This reflects instrumental or technical rationality that is seen as "one of the most oppressive features of contemporary society" by critical theorists (Kincheloe & McLaren, 2003, p. 438). In communicative action

> [Actors] are not primarily oriented to their own individual successes; they pursue their individual goals under the condition that they harmonise their plans of action on the basis of common situation definitions (Habermas, 1984, p. 286).

This implies that in learning and research settings, participants are not regarded as objects to promote predefined goals on sustainability. Instead, goals are jointly decided upon through a process of communication that recognises democratic principles and respect for all research participants (see Section 6.3.3). Within this perspective, social action is coordinated through processes of *reflective understanding* that may lead to collaborative learning and research activities (Archer, 2003; Brown & Goodman, 2001; Calhoun & Karaganis, 2001). Therefore, social learning processes that enhance the reflexive capacities of actors are the mainspring of the Habermasian theory of communicative action (see also Sections 3.2.3; 4.2.2 and 9.4.3; see Archer, 2003 on forms of reflexivity). Habermas has long been concerned with questions of social learning and particularly with learning in the moral domain (Cooke, 2004; see also Habermas, 1978, 1979). Processes of exploring organisational learning and sustainability in this study reflected communicative action within a specific context. This brings me to the third element of the theory of communicative action. For Habermas (1987), communicative action takes place within a social context that he calls the *lifeworld*, following Schütz (1967) and phenomenological sociology.

The phenomenological tradition regards the lifeworld as the *horizon* within which individuals seek to realise their projected ends (Baxter, 1987; Schütz, 1967). From a sociological perspective, Schütz uses the concept to refer to a common stock of ideas that give identity to the individual and the collective. Habermas (1987) describes the concept of the lifeworld from both an actor perspective, i.e. as used in the phenomenological tradition and from a social-theoretical spectator perspective (Eriksen & Weigård, 2003). This study draws on the concept only from an actor perspective[31]. In this perspective, I use the concept epistemologically to refer to background knowledge that actors at the NMK normally take for granted in regard to addressing sustainability issues. For example, actors may take for granted knowledge on how resources are distributed at the organisation and the forms of participation in decision-making processes that exist. Such background knowledge is in the "pre-reflective form of taken-for-granted background assumptions and naively mastered capacities" (Habermas, 1984, p. 336-337) that only become evident when made problematic (see Chapter 8). The lifeworld, as background knowledge, is made up of unquestioned assumptions and values that include skills, roles, norms and social practices (Mezirow, 1991). It is the pool of taken for granted and shared knowledge on organisational learning and sustainability that employees at the NMK all have a part of, and which ensures that they see sustainability issues in more or less the same way. Communicated through language, it may provide actors with a basis from which to identify and act upon sustainability issues (see for example Section 8.3). The second aim of this study focuses on reviewing and making problematic taken for granted assumptions and values underlying the NMK (see Sections 1.3.1, 7.3 and 9.3).

The next section examines Habermasian (1996) theory of *deliberative democracy* to provide a further epistemological lens for exploring organisational learning and sustainability in a community of practice.

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[31] From a social-theoretical spectator perspective, Habermas (1987) places the lifeworld in opposition to the subsystems of economy and administration that are characterised by strategic-oriented action. He argues that the system world invades and *colonises* the lifeworld by attacking its communicative values. However, this perspective has been critiqued by authors such as Archer (1996), Baxter (1987) and Honneth (1999, 2004) as highlighted in Section 3.4.4.

3.4.3 The theory of deliberative democracy

In his early writings, Habermas (1989, 1994) developed the notion of the *public sphere* as a discursive space in which citizens participate and act through dialogue and debate. *In Between Facts and Norms*, Habermas (1996), argues that the two major competing theories of democracy, the liberal and republican models[32] are both inadequate for explaining how democracy functions in contemporary society. Through discourse theory[33], Habermas proposes a procedural model of democracy that represents a third way between the liberal and republican views of democracy. According to Gutmann and Thompson (2004), Jürgen Habermas is responsible for reviving the idea of deliberation and giving it a more pragmatically democratic foundation. From a linguistic point of view, the concept of deliberative democracy is relatively new (Eriksen & Weigård, 2003). See Bohman and Reg (1997) for a detailed discussion on the history of deliberative democracy. The Habermasian (1996) theory of deliberative democracy is oriented towards *mutual understanding*, which does not mean that people will always agree, but rather are motivated to solve sustainability issues by argument. He draws parallels with the wave of what is referred to as deliberative politics that originates from the USA and is inspired by Deweyan pragmatism (see Section 1.4.2; see also Eriksen & Weigård, 2003).

Discourse theory has inspired several theorists to develop a more Habermasian theory of democracy, with a strong emphasis on participation (Eriksen & Weigård, 2003). They include Benhabib (2002), Bohman & Rehg (1997), Dryzek (2000), Elster (1998), Gutmann & Thompson (2004) among others. Some of these theorists comprise third generation *critical theorists* alluded to in Chapter 5 (see Section 5.2.3). In Chapter 4, I draw on some of these authors to describe the conditions necessary for enhancing democratic deliberations towards developing participant learning capability and reflexivity to address sustainability issues (see Sections 4.4.2). A fundamental principle of all deliberative theory is that "deliberation can change minds and opinions" in the context of enabling

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[32] The liberal model views the democratic process as a form of compromises among competing individual interests in society, democracy is referred to as a decision-making method based on the principle of majority rule (Staats, 2004; Eriksen & Weigård, 2003). In the republican model, however, democracy emphasises participation in formal and informal forums (Eriksen & Weigård, 2003).

[33] Habermas uses the concept *discourse* to refer to a form of communication in which actors subject themselves to the unforced force of the better argument in order to produce a tentative consensus about problematic claims (Morrow & Torres, 2002).

organisational learning and sustainability (Chambers, 2003, p. 318; see Section 9.4.2). Definitions of deliberation vary a great deal amongst theorists. For example, according to Chambers (2003, p. 309)

> deliberation is debate and discussion aimed at producing reasonable, well-informed opinions in which participants are willing to revise preferences in light of discussion, new information, and claims made by fellow participants.

For Dryzek (2000, p. 2) "authentic deliberation" allows for argument, rhetoric, humour, emotion, testimony or storytelling and even gossip during communication that encourages actors to reflect upon their choices in a non-coercive manner. He asserts that deliberations involve persuasion rather than coercion, manipulation or deception. Risse (2004) considers deliberation processes as characterised by an exchange of arguments based on a common frame of reference that is adjusted in the course of communication. Wagenaar (2002) views deliberation as both a special form of discussion, and as joint problem-solving within communities of practice (see Section 4.2.2). Seeing deliberation as joint problem-solving places organisational learning and sustainability in the complex reality that involves morphogenetic relationships (see Section 9.5.2). As a result, knowing such reality is an outcome of experiencing agential, structural and cultural factors that constrain sustainability in organisational contexts (see for example Section 8.3).

For this study, deliberative democracy entails inclusiveness and unconstrained communication where inclusiveness relates to both presence and voice during social learning processes (Smith, 2003). Such inclusiveness occurs when all actors are heard and can voice their opinion on equal terms (see Sections 5.4.1 and 5.5.2), and also when deliberations last long enough to reach a mutually acceptable agreement on the sustainability issues that are being addressed (Eriksen & Weigård, 2003). Unconstrained deliberations during communicative interactions at the NMK require the promotion of *deliberative*, as opposed to *strategic*, rationality (see Section 3.2.1 for features of strategic choice theory). Focus groups and workshop sessions at the NMK sought to provide such form of deliberations and conditions (see Sections 5.4 and 6.3.2). Following Freundlieb *et al.* (2004) I sought to foster democratic deliberations at the NMK as a way of developing participant learning capabilities and reflexivity for organisational change and sustainability

(see Sections 8.4.2 and 9.4.1). According to Freundlieb *et al.* (2004), fostering democratic social learning spaces in organisations makes it possible to raise and deliberate issues freely and on equal terms. Through such social spaces, deliberation may increase the capacity to address contextual issues related to organisational learning and sustainability. For Giroux (2006), deliberation has the potential to redefine organisations as democratic public spheres (see also Section 8.3.2). Nonetheless, democracy is context bound, constantly operating within particular structural and cultural settings (Greenwood & Levin, 2007). A social learning vision of justice and equality requires a consideration of the agential, structural and cultural dynamics of an organisation (see Section 7.2).

3.4.4 *Critiques of Habermasian theories*

Social theorists such as Archer (1996), Baxter (1987) and Honneth (1996, 1999, 2004) have critiqued the Habermasian theory of communicative action for its focus on *colonisation* of the lifeworld. They argue that incorporating systems theory as one of the pillars of the system-lifeworld model oversimplifies social reality (see Eriksen & Weigård, 2003 for details). Archer (1996) criticises Habermas for maintaining the differences between the constitution of the lifeworld and the system, instead of seeing the interrelationships between structure and culture. She criticises him further for distinguishing between lifeworld and system as two blocks. Instead, Archer wants Habermas to distinguish between the social system and the cultural system, and socio-cultural interaction and structural interaction (see Sections 3.2.4 and 3.2.5). As earlier stated, this research only draws on the Habermasian theory of communicative action from an epistemological perspective.

Honneth (1999) argues that the Habermasian theory of communicative action overlooks the consequences of continuing conflicts between specific social groups such as those that occurred at the NMK (see also Section 5.2.3). In other words, it under-theorises power relations in communities of practice. The recognition or lack of recognition of specific groups in organisations is intertwined with their capacity to enable or constrain change for sustainability (see Section 8.4). Following Honneth (1999), I have incorporated a communicative perspective conceived in terms of a theory of recognition, to address this limitation (see Sections 8.4.1 and 9.4.2). Reorienting the communicative action perspective

from Habermas's emphasis on mutual understanding to Honneth's conception of the conditions of recognition can provide a deeper understanding of formation of identities, norms and values at the NMK (see Chapter 7).

Habermasian deliberative democratic theory has been critiqued for its emphasis on mutual understanding (see Baber & Bartlett, 2005; Dryzek, 2000; Gutmann & Thompson, 2004). According to Chambers (2003), such an emphasis may compromise diversity and pluralism in organisations. Theorists concerned with diversity such as Fraser (1989, 1997), argue that deliberative theory is blind to the inability of marginalised groups to meet the conditions of deliberation. Hall (2007) points out that privileging discussion overshadows other forms of social action such as activism, organising environmental events and lobbying in social change processes. For Benhabib (1992) deliberative democracy reproduces inequalities of gender and race by stressing impartial rational discussion over passionate speech and action. Through the notion of *communicative interactions*, this study draws on deliberation in a flexible and an expanded manner to overcome some of these criticisms.

The next section summarises the ontological and epistemological implications for the study based on the Archerian and Habermasian social theories presented in this chapter.

3.5   Ontological and epistemological implications for the study

In Chapter 1 (see Section 1.3), I stated that this study sought to deepen an understanding of ontological and epistemological implications of exploring organisational and sustainability in a community of practice. This chapter has respectively discussed the Archerian morphogenetic approach and Habermasian critical theory to ground the study ontologically and epistemologically. This is important for avoiding the pitfalls of committing epistemic fallacy that entails reducing the issue of *being* and *becoming,* to the issue of *knowing* (Clegg, 2006). The next sections summarise the practical implications of exploring organisational learning and sustainability within the aforesaid theoretical frameworks.

3.5.1 Understanding social reality of organisational change

This chapter has presented the Archerian morphogenetic approach as a coherent theoretical framework for analysing and explaining organisational change. This approach has been discussed within Archerian social realism that is defined by the principles of emergence and analytical dualism. I utilise the concept of *morphogenetic relationships* to refer to agential, structural and cultural interactions that tend to change or maintain stability within an organisation. The research locates organisational learning and sustainability within the morphogenetic relationships of the NMK. Subsequently, understanding the social reality of organisational change is characterised by morphogenetic thinking, where all transformative processes are analysed in the three phases of conditioning, interaction and elaboration (see Section 3.3.1). These phases also correspond to the three broad cycles of inquiry reported in Chapter 6. The following are practical ontological implications for the study:

1. *Undertaking a form of critical organisational analysis*
   The research sought to identify structural and cultural factors that pre-existed at the NMK to *condition* participant learning capabilities and reflexivity to address sustainability issues (see Sections 6.3.3, 7.2 and 9.2.1). Identifying such factors within the Archerian morphogenetic approach enables one to make distinct analyses of structural and cultural factors, as a form of analytical dualism. Central to such analyses is a simultaneous *critique* of power relations and envisioning of new possibilities (see Sections 5.2.2, 7.3.1 and 9.3). This has the potential of illuminating the different and complex ways in which power operates at the NMK to influence participant learning capabilities to address sustainability issues (see for example Section 7.4).

2. *Exploring social or socio-cultural interactions from educative interventions*
   The research engages participants in environmental education processes aimed at acting upon contextual issues related to organisational learning and sustainability, as reported in Chapters 6, 7 and 8. This involves exploring social and socio-cultural interactions that arise from environmental education processes for addressing sustainability issues at the NMK (see Chapter 8).

3.   *Delineating and institutionalising emerging organisational changes*

The research delineates organisational changes that emerge from environmental education processes of addressing sustainability issues, with a view to institutionalising those changes at the NMK (see Sections 6.5.2, 9.5.3; see Chapter 8).

3.5.2   Exploring ways of knowing organisational change

A key dimension of this critical environmental education research involves knowing the complex social reality of enabling organisational learning and sustainability (see Section 1.3.1). Habermasian theories of *communicative action* and *deliberative democracy*, as discussed in this chapter, provide an appropriate framework for knowing such a reality. For Habermas, all processes of knowing are subject to critique, a process that comprises analysis and interactions mediated through communicative action and democratic deliberations. This reflects Deweyan pragmatism that focuses on the actions, situations and consequences of an inquiry, to ground ways of knowing in human experiences (Creswell, 2007; see Sections 1.4.2 and 5.3.2). Deweyan pragmatism emphasises dialogue among actors with different ways of knowing to uphold pluralism and diversity in addressing sustainability issues. The research utilises the notion of *communicative interactions* to advance ways of knowing that are dynamic, changing and context bound (see Section 4.4 for details). As environmental education processes, communicative interactions can potentially develop learning capabilities to address sustainability issues within a specific context (see Section 9.4). Consequently, exploring ways of knowing social reality of organisational learning and sustainability through communicative interactions at the NMK involves the following processes (see also Sections 4.4 and 9.4):

1.   *Promoting collective social action and innovation*

The research promotes collective social action and innovation for sustainability at the NMK. It seeks to involve the participants in processes of identifying contextual issues for action, acting on the issues and then reflecting on the social learning outcomes, as reported in Chapters 6, 7 and 8.

2. *Enhancing democratic deliberations*

    The study enhances democratic deliberations to address sustainability issues at the NMK by argument. It seeks to create social learning spaces where such issues may be deliberated on freely without the oppressive workings of power (see Sections 4.4.2, 6.3.3 and 9.4.2).

3. *Fostering critical reflections and reflexivity*

    The research fosters critical questioning and reflection within the participants to elicit assumptions, ideas and social relations that are in conflict with principles of sustainability (see Sections 4.4.3, 7.4 and 9.4.3). It positions structural and cultural factors that enable and constrain participant learning capabilities in the broader Kenyan context described in Chapter 2 (see Section 2.2).

4. *Strengthening systemic thinking capabilities*

    This research aims to develop participant learning capabilities to address sustainability issues holistically with a view to generating a systemic understanding of the NMK context (see Sections 4.4.4, 8.2.3 and 9.4.4).

3.6   Summary

This chapter has underscored the role of social theory in understanding organisational change and sustainability within a specific context. I have drawn on diverse sociological perspectives to provide insights into the nature of organisations, change agency, structure and culture. To highlight the role of social theory in organisational change the chapter has briefly described the *strategic choice theory* that is dominant within the management literature. From this chapter, it is evident that there is no universally true description of how organisations can change towards sustainability through social learning. The theoretical perspectives imply different ways of understanding and knowing the social reality of organisational change and sustainability. As mentioned in Chapter 1, any view one takes on the nature of organisational learning and change implies a view on the ways of knowing this and how it may be investigated.

The chapter has drawn on the work of Margaret Archer and Jürgen Habermas to explicitly state the ontological and epistemological basis for exploring organisational and sustainability at the NMK. Although both Margaret Archer and Jürgen Habermas contribute to understanding the social reality of organisational change processes, it is Archerian social realism that provides an ontological lens for the study. I have used Habermasian communicative action and deliberative democracy to provide an epistemological lens for exploring and knowing organisation change and sustainability outcomes. Using the Archerian morphogenic approach, the chapter has outlined how structural and cultural emergent properties that emerge out of human activity may both enable and constrain organisational change and sustainability initiatives. This chapter has demonstrated that it is possible to analyse and explain how change and stability is achieved over time in the context of organisational learning and sustainability. I have shared themes from Habermasian critical theory to provide useful tools for strengthening agential capabilities and reflexivity to address sustainability issues through social learning processes in communities of practice.

Chapter 4 explores organisational learning and sustainability, as processes of social change and development using Lave and Wenger's (1991) communities of practice as an analytical conceptual framework encompassing both the ontology and epistemology of learning. The framework therefore allows for the exploration of Archerian morphogenetic processes and Habermasian dialogical processes of communicative action at the NMK.

Chapter 4 Exploring Organisational Learning and Sustainability as Social Learning Processes

4.1   Introduction

This study applies the concept of communicative interactions to advance environmental education processes that are contextual, critical, reflexive and open-ended (Lotz-Sisitka, 2004). These processes aim to foster the emergence of organisational learning and sustainability in communities of practice. Chapter 1 (see Section 1.4.4) introduced Lave and Wenger's (1991) *communities of practice* approach, as both unit of analysis and *social learning theory* for exploring organisational learning and sustainability at the NMK. Chapter 3 presented Archerian and Habermasian theoretical frameworks for respectively analysing morphogenetic relationships and communicative interactions in organisations. This chapter explores organisational learning and sustainability as social learning processes of change and development to illuminate further the pedagogical implications of the study.

The first section of the chapter draws on business management literature to share theoretical perspectives on the notion of organisational learning. It examines social learning theory for organisational learning based on the communities of practice approach. I provide critiques of the communities of practice approach to learning. In the second section, I examine various meanings associated with the difficulty concept of sustainability. I share perspectives on sustainability from both individual learning and social learning theories in the context of environmental education. The third section builds on the epistemological perspectives discussed in Chapter 3 (see Section 3.4) to offer details on the four interrelated dynamics of communicative interactions introduced in Chapter 1 (see Section 1.5.1).

4.2   Organisational learning: meaning, theory and social change

As a mainstream field within management studies, *organisational learning* has attracted substantial interest from both academics and practitioners (Palmer & Hardy, 2000). According to Peltonen and Lämsä (2004), the literature on organisational learning has a

long tradition in management and organisational studies that goes back to the writings of authors such as March and Simon (1958). It was initially based on theories of organisational behaviour within the field of management science (Easterby-Smith, 1997; March & Simon, 1958). The aim was to help organisations learn to adapt to changes in the environmental and to provide prescriptive literature (Elkjaer, 2003). While most of the early work focused on individual level approaches, more recent developments have contributed to our understanding of learning as participation in communities of practice in organisations (Lave & Wenger, 1991). According to Caldwell (2006), the concept of *communities of practice* enriches and reformulates the notion of organisational learning by moving towards a social theory of learning founded on practice. This section draws on the business management literature to examine the notion of *organisational learning* based on both individual learning theory and social learning theory founded on practice.

I first introduce theoretical perspectives of organisational learning based on individual learning theory, and critiques of these perspectives. I then discuss social learning theory for exploring organisational learning through the lens of the communities of practice approach (Lave & Wenger, 1991; Wenger, 1998, 2000; Wenger *et al*., 2002). Underpinning this discussion is the application of the concept of communities of practice, as both social learning theory and unit of analysis for exploring morphogenetic relationships and communicative interactions. Finally, I discuss critiques of the communities of practice approach to analysing social learning processes in organisational contexts.

4.2.1 Meaning, theoretical perspectives and critiques

It is important at the onset to point out that the concepts of *organisational learning* and *learning organisation* are sometimes used interchangeably in management literature (Lundberg, 1995). However, Easterby-Smith (1997) suggests that the notion of *learning organisation* constitutes a prescriptive approach whereas that of *organisational learning* refers to academic theories and analyses. Finger and Brand (1999) view learning organisation as an ideal towards which organisations aim to achieve as in sustainability. They view organisational learning as the *activity* and *process* by which organizations reach this ideal. Finger and Brand (1999, p. 137) define organisational learning as "a transformational process to which [actors] individually and collectively, contribute through

their learning. But for Peltonen and Lämsä (2004, p. 251) both concepts converge in a shared interest in the process of learning, which they define, as the "acquisition and development of new knowledge and new ways of acting". The learning organisation approach touches on the effect of knowledge creation on organisational change and learning. Based on Archerian and Habermasian theoretical perspectives which underpin this study, I use the term *organisational learning* to signify the development of agential learning capabilities and reflexivity for social change in organisations. Furthermore, I view organisations as emergent strata of social reality dependent upon, but irreducible to human agency (see Section 3.2.2).

The definitions and perspectives on organisational learning are vast and fragmented in the literature (Peltonen & Lämsä, 2004). Most authors writing on organisational learning (e.g. Clegg *et al.*, 2005; DeFillipi & Ornstein, 2003; Padaki, 2002) draw on a conceptual framework developed by Chris Argyris and Donald Schön (1978, 1996) and the five disciplines of learning organisations articulated by Peter Senge (1990). This conceptual framework has its theoretical roots in perspectives of cybernetics and systems science (Ackoff, 1974). In their book, *Theory in practice,* Argyris and Schön (1974) examine how professional practice is informed by theories of action. They draw on these theories of action when trying to understand organisational learning (Argyris & Schön, 1978; see Section 5.3.1 for action science). Many writers have critiqued narrow conceptions on organisational learning (e.g. Barton *et al.*, 2004; Keep & Rainbird, 2002; Raven, 2001). Keep and Rainbird (2002) criticise the management literature for its focus on definitional argument, model building and for being prescriptive. Raven (2001) says that the importance of systems analysis has not been recognised and the dominant focus on systems thinking in the literature reflects an authoritarian mindset. Barton *et al.* (2004, p. 6) accuse systems thinkers for being insensitive to issues of power and for holding to "unitarist and managerialist assumptions". The philosophical and theoretical frameworks introduced in Chapter 1 and discussed in Chapter 3 address some of these concerns.

The learning theory in much of the literature on organisational learning is inspired by the field of individual-oriented psychology (Elkjaer, 2003; see Stacey, 2000 for details). However, individual learning theory based on a *cognitive perspective* of organisational

learning overlooks the largely tacit dimension of workplace practice (Handley *et al.*, 2006). Behavioural and cognitive theories of learning provide an inadequate reading of organisational learning and downplay the role of learning as an integral feature of working with others in historically constituted contexts (Fuller, 2007; Lave & Wenger, 1991). Moreover, organisational learning based on cognitive theories of learning may lead to an epistemic fallacy in which the issue of *being* and *becoming* is reduced to that of *knowing* (Elkjaer, 2003; see Section 3.5). Yanow (2000; see also Cook & Yanow, 1996) critique cognitive theories of learning and suggest a conceptualisation of learning as cultural processes. This research places emphasis on both individual and collective learning in organisational contexts. It views individual learning "as emergent, involving opportunities to *participate* in the *practices* of a community of practice", as well as the development of agential learning capabilities and reflexivity to address sustainability issues (Handley *et al.*, 2006, p. 642). In the next section I discuss social learning theory for exploring organisational learning processes through the lens of the Lave and Wenger communities of practice approach.

4.2.2   Communities of practice and social learning processes

This section discusses the concept of *communities of practice*, as both social learning theory and unit of analysis for exploring morphogenetic processes and the emergence of sustainability in a specific context. The concept of *communities of practice* is regarded as one of the most influential concepts to have emerged within the social sciences during recent years (Hughes *et al.*, 2007; Stehlik & Carden, 2005; Wenger *et al*., 2002). It has become an increasingly influential model of learning, organisation and creativity (Hughes *et al*., 2007). The concept is informing current debates about social learning processes (see Fuller, 2007; Roberts, 2006), managerial control of organisational knowledge (see Hughes, 2007; Wenger *et al*., 2002) and general and vocational education (see Owen, 2005; Stehlik, 2005; Willis, 2005).

The downside of the communities of practice approach is that it has "become almost a managerialist fad in its application to organisational development, workplace training and even restructuring and change management" (Stehlik & Carden, 2005, p. 1). For example, Wenger *et al.* (2002, p. 3) argue that "companies at the forefront of the knowledge

economy are succeeding on the basis of communities of practice". They point out that organisations such as the World Bank deliver on their vision of fighting poverty[34], with knowledge as well as money, by relying on communities of practice that include employees, poor countries and external partners (*ibid*.). This shows that communities of practice are becoming widely adopted and are being presented as an instrumental approach to meeting individual and organisational strategic goals (Billet, 2007). I examine social learning theory based on the communities of practice approach as a conceptual framework for exploring organisational learning in a specific context.

Social learning theory for organisational learning

According to Elkjaer (2003) all social learning theories view learning as participation in social processes emphasising both issues of *knowing*, and issues of *being* and *becoming*. Thus, social learning theory, as applied in this study, considers both the issue of agential existence and development (morphogenetic relationships), and the issue of actors coming to know about themselves and what it means to be part of a community of practice (communicative interactions). Deweyan pragmatism (see Section 1.4.2) and Archerian social realism (see Section 1.4.1), introduced in Chapter 1, contribute to this understanding. For instance, pragmatists believe in an external world independent of the mind, as well as those lodged in the mind (Cherryholmes, 1999; see Section 1.4.2). As mentioned in Chapter 3 social learning processes that enhance reflective understanding amongst actors are the mainspring of Habermasian theory of communicative action (see Sections 3.2.3; see also Section 3.2.3 for Archer's forms of reflexivity).

Lave and Wenger's (1991) original conceptualisation of communities of practice as a context for situated learning provides a useful analytical framework for exploring organisational learning in the context of sustainability. In order to foster learning and innovation for sustainability, organisations such as the NMK need to conceive of themselves as communities of practice (Brown & Duguid, 1991). They also need to redesign themselves as reflexive social learning systems with the capability to participate in broader communities of practice (Wenger, 2000). Situated learning theory positions the

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[34] See Section 7.3.2 of Chapter 7 for a participant's interpretation of the meaning of sustainability based on the role of the World Bank in fighting poverty (see also Section 2.2.3).

community of practice as the context in which an individual develops sustainability practices (including assumptions and values) and identities (social relations) appropriate to that community. Chapter 1 outlined key features of social learning within the communities of practice approach (see Section 1.4.4). Lave and Wenger (1991, p. 53) describe social learning as an "integral and inseparable aspect of social practice" which involves the construction of identity through changing forms of participation in communities of practice. This understanding effectively extends morphogenetic relationships and communicative interactions as introduced in Chapter 1 (see Sections 1.5.1 and 1.5.4) into social learning processes. Three core dimensions of social learning processes which occur within (and across) communities of practice are evident from Lave and Wenger's description of situated learning. These are discussed as follows:

1. *Participation*

    According to Wenger (1998), meaning in communities of practice is shared through reciprocal processes of participation and reification. Wenger (1998, p. 4) refers to participation more broadly as "processes of being active participants in the practices of social communities and constructing *identities* in relation to these communities". This implies that it is through agential participation in a community of practice that actors develop their identities and practice in the context of enabling sustainability in organisations. However, Handley *et al.* (2005; see also Caldwell, 2006) question the way the term *participation* is applied in the situated learning and community of practice literature (see Section 4.2.3 for critiques of communities of practice). Due to its ambiguity, it is difficult to know "when an individual *is* or *is not* 'participating' in a community of practice" (Handley *et al.,* 2005, p. 649; see Greenwood & Levin, 2007 for details on participation). Handley *et al.* (2005) propose a refinement of the definition of participation to allow for greater conceptual clarity. They view participation as "meaningful activity where meaning is developed through shared relationships and shared identities" (*ibid.,* p. 651). I interpret participation more broadly as collaboration based on democratic partnership of actors whose roles and relationships are fluid to maximise reciprocal support in a community of practice (Somekh, 2006). This understanding is based on Deweyan pragmatism which grounds

the critical action research methodology and Habermasian critical theory applied in the study (see Sections 1.4.2, 3.4 and 5.3).

2. *Developing a relevant identity*

    Lave and Wenger's (1991) situated learning theory brings a renewed focus on issues of identity (see Section 8.6). In this perspective learning is not simply about developing one's knowledge and practice. It also involves a process of understanding who we are and in which communities of practice we belong. Brown and Duguid (1991) explain that organisational learning is best understood in terms of the communities being formed or joined and personal identities being changed. In other words, the central issue in "learning is *becoming* a practitioner not learning about practice" (*ibid*., p. 48). However, within the situated learning literature, there is little work on theories of identity construction (Handley, *et al*., 2005). In this research, Archerian social realism provides a lens for reading identity construction in communities of practice in the context of enabling social change processes and the emergence of sustainability. Social learning processes are viewed as developing agential learning capabilities and reflexivity for addressing sustainability issues in specific organisational contexts.

3. *Practice*

    According to Wenger (1998, p. 47), practice is about "doing in a historical and social context that gives structure and meaning to what we do". Wenger *et al.* (2002) describe practice as a set of frameworks, ideas, tools, information, language and documents that community members share. As practitioners, members of communities of practice in organisations such as the NMK, develop a shared collection of resources that include organisational experiences, stories, skills and frameworks for addressing contextual issues. Sharing such practices through communicative interactions can sustain social learning processes aimed at addressing sustainability issues at the NMK. This study sought to review assumptions and values underlying the NMK to reveal organisational practices that influenced participant learning capabilities to enable organisational learning and sustainability (see Chapters 7 and 8).

Following these dimensions of social learning processes, a learning theory based on the communities of practice approach views organisational learning as collective, relational social processes aimed at improving sustainability practices in an organisation. In this study, new social relations were formed, negotiated and sustained around collaborative activities of social learning based on critical action research, as a method of inquiry and epistemology of change (see Section 5.3). Underpinning notions of critical action research, as a form of social learning, is the assumption that ways of knowing may be conceptualised within and beyond communities of practice (Hart, 2007; see Section 5.3.1).

The justification for applying social learning theory is to address the limitations of the "conventional theories of learning" (Handley *et al.*, 2006), and to place an emphasis on exploring morphogenetic relationships through communicative interactions in a community of practice. Social learning theory offers a suitable conceptual analytical framework for exploring social change processes and the emergence of organisational learning and sustainability, as reported in Chapters 7 and 8. Lave and Wenger's communities of practice approach thus complements the Archerian and Habermasian theoretical frameworks, which respectively ground this study ontologically and epistemologically (see Chapter 3). I briefly examine communities of practice as unit of analysis for exploring organisational learning and sustainability in context.

Communities of practice as unit of analysis

Lave and Wenger's theory of learning as participation in communities of practice, as explained above, promotes the collective or group as the important unit of analysis rather than the individual (Fuller, 2007). Individuals are important as long as they learn by being in social relation to others. As a unit of analysis, this study considers communities of practice as organisational contexts in which actors interact to identify and deliberate on structural and cultural factors that influence their learning capabilities and reflexivity to address sustainability issues (see Section 1.4.4). Although communities of practice occur in various forms, they share a basic structure that consists of three essential elements that Wenger *et al.* (2002; see Section 9.5.1) identify as:

1. A *domain* of knowledge which creates common ground and a sense of common identity for members in communities of practice.

2.   A *community* of people who care about their common ground and a sense of identity in the context of enabling organisational learning and sustainability (see Section 8.6).

3.   The *practices* in form of context specific knowledge, assumptions, values and social relations that are developed, shared and maintained over time within the community (see Section 9.3)

For Wenger (Wenger, 2000), it is the combination of these three elements that constitutes a community of practice, and it is by developing the elements in parallel that one cultivates such a community. As a constellation of communities of practice, the NMK is defined by the *National Museums and Heritage Act* (Government of Kenya, 2006), which delineates it from other heritage institutions in Kenya (see Section 2.3.1 for mission and vision statements). However, heritage conservation, as a shared domain, consists of contextual issues which members of communities of practice at the organisation experienced, as constraints to their learning capabilities and reflexivity to enable social change and the emergence of sustainability. This study addresses such issues with a view to developing participant learning capabilities for improving the role of the NMK in fostering a sustainable society (see Section 8.6).

In addition to the elements outlined above, Wenger (2000) distinguishes between three modes of belonging to a community of practice as *engagement*, *imagination* and *alignment*. Engagement entails doing things together, for example, deliberating and acting on contextual issues to improve organisational learning and sustainability practices (see Chapters 6 and 8). Imagination requires learners to create images of themselves, their communities and of society with a view to addressing sustainability issues and exploring possibilities for social change (see Section 7.3). Alignment involves making sure that social change processes and the emergence of sustainability in a community of practice are institutionalised so that they can last beyond the processes of mutual engagement and imagination (see Section 8.7). These modes of belonging echo features of critical action research as described in Chapter 5 (see Section 5.3.1). The relative autonomy of communities of practice is central in allowing the creative reshaping of sustainability practices in organisations such as at the NMK, through participation (communicative interactions) and mutual engagement (reflexivity), as sought in this study.

Having described the basic structure of a community of practice as a unit of analysis, I explain how it can be designed and cultivated for the purpose of organisational learning and fostering sustainability.

Designing and cultivating communities of practice

This study required a core group of participants whose passion for organisational learning had the potential to energise the NMK through the provision of ideas and practical knowledge on sustainability practices. In their earlier work, Lave and Wenger (1991) presented communities of practice as informal and self-organising systems that cannot be established quickly or artificially. However, in later work Wenger (2000; see also Wenger *et al.*, 2002) suggests that communities of practice can be cultivated for organisational learning purposes, and at the same time are open to manipulation by organisational designers. I explain how a community of practice may be designed and cultivated in an organisational context[35] for the purposes of improving sustainability practices (see also Section 6.3.2).

Following Wenger (1998), Altrichter (2005) outlines three steps on how communities of practice can be designed and developed as sites of organisational learning and application of practical knowledge. The first step is to identify potential communities of practice within an organisation (see Section 6.3.2). Practical knowledge on the organisational learning and sustainability required by organisations usually exist in some form. The second step is to provide infrastructure and support to the evolving community of practice. Although informal communities of practice may be self-sustaining, they lack legitimacy and the budget of established departments in an organisation. Organisations may appreciate them, further them and use them for their sustainability change initiatives, or they may even hinder them. Support for communities of practice may be in the form of provision of resources such as meeting facilities and organisational sponsorship to conferences (see Section 8.4.2). The third and last step is to use non-traditional methods to measure value

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[35] According to Wenger *et al*. (2002), communities of practice are a natural part of organisational life. They will develop on their own and many may thrive, whether or not an organisation recognises them. However, organisations need to cultivate communities of practice actively for improving their practices and those of the members. Design and development are more about fostering participation than planning and organising activities of communities of practice (*ibid.*).

and adapt reward systems. This entails documenting and sharing communities of practice outcomes throughout the organisation. I followed a similar process when recruiting members to the NMK research group as explained in Chapter 6 (see Section 6.3.2).

In his latter work with the business community, Wenger focuses on how communities of practice can be strengthened, facilitated and cultivated within organisations to build and enhance learning capabilities (see Wenger *et al.*, 2002; Wenger & Snyder, 2000). Wenger *et al.* (2002, p. 13) point out that

> organizations can do a lot to create an environment in which [communities of practice] can prosper: valuing the learning they do, making time and other resources available for their work, encouraging participation, and removing barriers. Creating such a context also entails integrating communities in the organization – giving them a voice in decisions and legitimacy in influencing operating units, and developing internal processes for managing the value they create.

To generate enough excitement, relevance and value in engaging their members in fostering sustainability, communities of practice need to be cultivated. Wenger *et al.* (2002) have developed principles that are aimed at revealing a community's own internal direction, character and energy. These are designing for evolution, opening dialogue between inside and outside perspectives, inviting different levels of participation, developing both public and private community spaces, focusing on value, combining familiarity and excitement and creating a rhythm for the community. These principles support methodological and epistemological perspectives that inform this research.

While the communities of practice approach provides a useful lens for observing learning interactions at a sociological and social process level, it has been a subject of criticism in management literature (e.g. Barton & Tusting, 2005; Caldwell, 2006; Fuller, 2007; Handley *et al.*, 2006; Mutch, 2003; Roberts, 2006). The next section discusses some of the criticisms.

4.2.3 Critiques of communities of practice approach

The communities of practice approach has been critiqued for neglecting history, power relationships, language and meaning-making processes (Barton & Tusting, 2005; Contu &

Willmott, 2003; Roberts, 2006). Although Lave and Wenger (1991) acknowledge the importance of power in shaping participation in communities of practice, they fail to explore more deeply the implications of power distribution in such contexts (Contu & Willmott, 2003; Robert, 2006). Fuller (2007) argues that the ability of communities of practice to transform is inadequately dealt with Lave and Wenger (1991). A key dimension of this research process is an epistemological critique of the ways in which power is embedded and reinforced in social and socio-cultural interactions in organisations (see Section 5.2.2, 7.2 and 7.4.2).

According to Wenger (1998), meaning is negotiated within communities of practice. However, Bourdieu's (1977) notion of *habitus*[36] challenges this view of focusing on changes brought about through practice at the exclusion of a community's cultural history (Mutch, 2003; Roberts, 2006). Furthermore, community of practice theory "tells us nothing about how, in practice, members of a community change their practice or innovate" for sustainability (Fox, 2000, p. 860). Caldwell (2006) critiques Wenger's (1998, p. 92) idea that communities of practice are sustained through an ongoing "negotiation of meaning" for being based on reciprocal processes of participation and reification which lack analytical clarity. According to Caldwell (2006, p. 156), participation appears to depend on an "idealized notion of mutual meaning creation in practice, while reification is an amorphous concept covering virtually every form of signification and objectification of human activity" (see also Handley *et al*., 2006). This study uses the Archerian morphogenetic approach as a lens for analysing the historical, social and socio-cultural contexts in which the NMK community of practice was embedded (see Sections 2.2, 2.3 and 7.2).

In their book, *Cultivating communities of practice*, Wenger *et al*. (2002, p. 141) assign a chapter to what they refer to as the "downside of communities of practice". They argue that

> The very qualities that make a community as an ideal structure for learning – a
> shared perspectives on a domain, trust, a communal identity, long-standing

[36] Following Bourdieu (1977) *habitus* can be understood as the mechanism by which cultural norms and action particular to a community of practice are unconsciously incorporated in the formation of that community during the socialisation process. It refers to long-lasting and exchangeable values and dispositions gained from a community's cultural history (see also Webb *et al*., 2002).

> relationships, an established practice – are the same qualities that can hold it hostage to its history and its achievements. The community can become an ideal structure for avoiding learning (*ibid.,* p. 141).

Trust, familiarity and mutual understanding developed in their social and cultural contexts are necessary for enabling organisational learning and sustainability in communities of practice (Roberts, 2000; see also Sections 3.4 and 6.3.3). The notion of *communicative interactions*, as advanced by this study, aimed to foster trust, mutual understanding, pluralism and diversity in the NMK community of practice towards improving sustainability practices (see Sections 1.5.1, 3.4 and 8.3.2).

Notwithstanding these limitations, the communities of practice approach, provides this research with both unit of analysis and a social learning theory for exploring morphogenetic relationships through communicative interactions. Many authors draw on the approach when contributing to the growing body of literature on social learning theory in the context of environmental education and sustainability (e.g. Hart, 2007; Lotz-Sisitka, 2008; Lupele, 2007). The next section explores the concept of *sustainability,* which is the object of organisational learning processes in a community of practice for this study.

4.3   Sustainability: meaning, theory and change

Sustainability is the object of the organisational learning processes in the NMK community of practice that forms the unit of analysis in this study (see Section 7.3). The concept of sustainability has spanned the literature of many disciplines ever since it appeared on the international scene in the late 1970s. The literature on sustainability is informed by different worldviews, as reflected in its diverse definitions (Eichler, 1999). As Eichler (*ibid.*, p. 182) puts it, "there is consensus that there is no consensus on the meaning" of sustainability as a concept. However, action towards sustainability need not be suspended until a consensus definition is established (Tilbury & Cooke, 2005). This study is more interested in understanding sustainability as an ongoing social learning process that seeks organisational change and development, and not a concept to be implemented (Tilbury, 2004). In this section of the chapter, I first examine the meaning and theoretical perspectives that underpin the concept of *sustainability*. I then briefly explain how sustainability has been used as a focus for learning in the field of environmental education.

Finally, I draw on the environmental education literature to discuss social learning theory for exploring sustainability in communities of practice.

4.3.1 Meaning and theoretical perspectives

Sustainability literature has often deplored the vague or ill-defined nature of the concept (Becker *et al.*, 1999). As a concept, sustainability first emerged on the international scene in the late 1970s in Wes Jackson's work in agriculture (Orr, 2001), in Lester Brown's *Building a Sustainable Society* (1980) and in the *World Conservation Strategy* (IUCN, UNEP & WWF, 1980). The World Commission on Environment and Development made it a central feature of its Brundtland Report (WCED, 1980). However, the concept only gained importance among environmental educators following the 1992 United Nations Conference on Environment and Development (UNCED). Chapter 36 of *Agenda 21* (UNESCO, 1992), the action blueprint from the 1992 Rio Earth Summit, underscored the critical role of education in achieving change towards sustainability. Since 1992 the term has come to mean different things to different writers and may be used interchangeably with the concept of *sustainable development* (see Section 2.4.1).

According to Scott and Gough (2003), there exists confusion in the usage of the terms *sustainable development* and *sustainability* due to such interchangeable use. They view sustainable development as a learning process through which humans can learn to build capacity to live more sustainably. However, Paehlke (1999, p.243) has argued that many environmentalists see sustainable development as a "little more than a political cover for otherwise unacceptable corporate environmental practices". For this reason some people, including myself, prefer the use of the term *sustainability* as it has less political baggage and is often associated with issues relating to quality of life rather than merely development (Tilbury & Cooke, 2005). For example, in organisations such as the NMK exploring issues related to social justice, equality and democracy has the potential of improving quality of life at workplaces in the context of sustainability (see Chapter 8).

In spite of its contested and vague meaning, the concept of sustainability has been used in many fields to guide decision-making towards a more sustainable society (Köhn & Gowdy, 2001). It has become a keystone of the global dialogue about humanity's future (Orr, 2002).

However, the ambivalence character of the concept makes it both conceptually and operationally challenging. This is because it is hard to sustain something that exists in an environment of permanent change, as in the case of organisations such as the NMK (see Section 7.3.2). The explosion of literature surrounding the many aspects of the sustainability debate has also contributed to the little progress in operationalising the concept (Kane, 1999). Köhn and Gowdy, (2001) have argued that since sustainability is about change, an evolutionary perspective supporting the idea that there is no universally sustainable state is essential. But for Paehlke (1999), the analytical problems associated with sustainability are not simply a result of its vagueness, but stem from the complexity of the concept. He argues that analytical approaches should not struggle to reveal a single legitimate meaning of sustainability. Rather, the multiplicity of meanings of sustainability should be acknowledged. He goes on to suggest that we should distinguish between environmental, economic and social sustainability (see Section 2.1). When integrating these dimensions in the study of organisations, they ought to be kept distinct on an analytical level. Drawing on the concept of multiple meanings, this study has sought to analyse dimensions of sustainability in terms of morphogenetic relationships within an organisation. See Section 7.3.2 for the participant interpretations of sustainability in the NMK context.

Although sustainability is associated with occurrences of ecological crisis it describes a field of investigation that is based on a society-oriented definition of problems (Becker *et al.*, 1999). For Blewitt (2004a), it encompasses technological, philosophical, economic, social, ecological, political and scientific dimensions. Becker *et al.* (1999, p. 7) state that sustainability should be understood as "a *valuated quality* of processes, structures and systems". They have defined it within a framework of economic processes, social processes and decision-making processes. From a political science perspective, Choucri (1999) identifies key dimensions of sustainability as ecological configuration, economic activity, political behaviour and governance and institutional performance. He argues that these four dimensions are derived from basic processes that are sustained by the decisions we make and the actions we take. He identifies the basic processes of economic performance as production and consumption, while those of political behaviour and governance are participation and responsiveness. This study placed emphasis on social, political and

economic dimensions of sustainability, with a view to promoting social justice and democratic forms of governance at the NMK. It sought to foster basic assumptions and values that support social equity, collective social actions, equality of opportunity and interdependence at the NMK (Elkington, 1999; see Chapters 7 and 8).

Contextually mediated and interacting issues of governance, distribution of resources and decision-making processes underpin sustainability change initiatives in organisations such as the NMK (Doppelt, 2003; see Section 2.3.3 and Chapter 8). According to Elkington (1999), governance has traditionally focused on the ways in which organisations are managed and on the nature of the accountability of the managers (see also Section 2.2.2). He outlines characteristics of good governance systems as participation, public acceptance, support of equity (equality and gender balance), tolerance of diversity, mobilisation of resources for social purposes and service-orientation. Doppelt (2003, p. 78) describes governance systems are "three-legged stools" that shape information flows, decision-making processes and distribution of resources in an organisation. He says that each of these factors influences how power and authority are distributed in an organisation (see Section 7.4.2 on power relations at the NMK). From the foregoing, transforming governance systems in organisations is fundamental to achieving sustainability (see Section 8.3).

A critical perspective adopted by this study (see Section 5.2) entails examining how power operates and is viewed within organisations in regard to enabling sustainability. Agential, structural and cultural factors that constrain organisational learning and sustainability within a specific context are anchored in power relations (see Sections 3.3 and 7.2). Addressing such factors through communicative interactions, as stated in Chapter 3 (see Section 3.5.2) may lead to what Dunphy *et al.* (2003, p. 62) regard as a *sustaining organisation*. Dunphy with Griffiths and Benn (*ibid.*) describe a sustaining organisation as one that fully incorporates the tenets of social and ecological sustainability into its functions. This necessitates building structures, processes and systems where questions related to identity, information and relationships (Read, 2000) can be *communicatively* considered towards developing agential learning capabilities and reflexivity for addressing sustainability issues. This study utilises the notion of *sustaining organisation* to signify an

open-ended process of exploring possibilities for achieving sustainability in the context of environmental education in a particular setting (Dunphy *et al.*, 2003; see also Janse van Rensburg & Lotz-Sisitka, 2000; see Sections 7.3.2 and 9.3.2). To become a sustaining organisation, the NMK needs to fully incorporate sustainability principles into its structural and cultural domains by institutionalising emergent social change processes (see Section 8.7). In the next section I explore the concept of sustainability from a learning and education perspective.

4.3.2   *Sustainability from a learning and education viewpoint*

According to Scott and Gough (2003) learning is a key component of social change and innovation for sustainability in the context of environmental education. In Chapter 2, I examined environmental education broadly to encompass a focus on organisational learning and sustainability (see Section 2.4.3). From this perspective, sustainability can be interpreted as a continuous learning process that involves learners in creating their vision, and action for reconsidering social changes (Huckle & Sterling, 1996; Tilbury & Cooke, 2005; UNESCO, 2002). Environmental educators such as Huckle (1993, 1996), Sterling (1993) and Fien (1993a, 2000) have used the label *education for sustainability* to emphasise the link between environmental issues and those of development. These authors emphasise the need to critique the roles of technology, economics, unequal power relations and a modernist worldview so as to address the environmental crisis successfully. Some authors (e.g. Janse van Rensburg & Lotz-Sisitka, 2000; Tilbury, 2007; Tilbury & Cooke, 2005) have preferred the concept of a *learning* focus for sustainability to an *education* focus. For example, in a teacher professional development project in South Africa, Janse van Rensburg and Lotz Sisitka (2000) chose to use the term *learning for sustainability* to indicate their intention of adopting a more open-ended approach to the concept of sustainability. Tilbury and Cooke (2005) have used the term to refer to an approach that is relevant to a variety of learning areas that include environmental education. Lotz-Sisitka (2007) notes that even after fifteen years of the Rio Summit, there is still considerable vagueness in the field of environmental education on how to conceptualise the relationship between the environment and sustainable development thinking.

Sterling (2004, p. 47) views the problems of integrating sustainability within education theory and practice as, "issues of basic epistemology and a lack of sufficient clarity about the philosophic challenge posed by sustainability education". To address current conditions of unsustainable lifestyles, systemic complexity and uncertainty he advocates a change of educational culture that goes beyond the traditions of environmental education and subsequent expressions of sustainability education. He terms this culture *sustainable education* to suggest a holistic educational paradigm concerned with the quality of relationships rather than product, with emerging rather than predetermined outcomes. This study explores sustainability as morphogenetic relationships, rather than a product of social learning processes that occur in communities of practice (see Section 4.3.3). Utilising social learning theory to explore sustainability, as discussed in the next section, has enabled me to overcome problems of integrating sustainability within environmental education, as indicated by Sterling.

4.3.3   Social learning theory for exploring sustainability

There is an increasing use of social learning theory to address sustainability issues in the field of environmental education (see Wals & Van der Leij, 2007). This section draws on this body of literature to illuminate principles and perspectives of social learning theory for exploring sustainability as a process of change in communities of practice. From a social learning theory perspective Wals and Van der Leij (2007, p. 18) regard sustainability as both "an evolving product and an engaging process". According to Capra (2007), social learning theory focuses on the significance of relationships, collaborative learning, systemic thinking and the roles of diversity and flexibility in fostering a sustainable society. Keen *et al.* (2005, p.4) describe social learning as "the collective action and reflection that occurs among different individuals and groups as they work to improve the management of human and environmental interrelations". These principles support ontological, epistemological and methodological features that underpin this critical action research study (see Sections 3.3, 3.4, 5.3.1 and 5.3.2).

Glaser (2007) views social learning as an interactive, participatory, negotiated approach to facilitating collective problem solving and decision-making. Such an approach is informed by diverse theoretical frames from systems theory (see Sections 1.5.6, 3.3.4 and 4.4.4),

organisational learning and Habermasian theory of communicative action (see Bradbury, 2007; Rist *et al.*, 2007; see Section 3.4). Jiggins *et al.* (2007, p. 420) have treated social learning as "an interactive process of shared, experiential learning, amplified by facilitated communication and dialogue". Such a process may lead organisations to embed sustainability practices in their structures, culture and processes (see Section 8.7). Dyball *et al.* (2007) regard social learning as a process of iterative reflection that occurs when members of communities of practice share their experiences, ideas and contexts in the context of enabling sustainability. Bradbury (2007) argues that social learning for sustainability requires an incorporation of different ways of knowing that is essentially interdisciplinary and involve multi-actors (see Sections 5.3.1 and 9.4). Essential to this process is the development of a space in which actors can hold dialogue for collective action on sustainability innovations (see Sections 3.4.3 and 8.4). This study explores different ways of knowing the complex reality of enabling social change processes and the emergence of sustainability at the NMK (see Section 9.4).

Tilbury (2007) identifies three key concepts underpinning social learning theory for sustainability as the need for challenging mental models, applying new learning approaches and embracing pluralism and diversity in communities of practice. She further outlines key components of social learning-based change for sustainability as systemic thinking, envisioning or futures thinking, critical thinking and reflection, partnerships for change and participation. Based on their recent work on adaptive approaches to environmental management, Dyball *et al.,* (2007; see also Keen *et al.*, 2005) identify five interacting and overlapping strands of social learning that are related to those of Tilbury (see also Tilbury & Cooke, 2005). These are reflection and reflexivity, systems orientation and systems thinking, integration and synthesis, negotiation and collaboration and participation and engagement. Chapter 5 (see Section 5.3.2) discusses the congruence of these components with principles of critical action research and Deweyan pragmatism.

Most of the perspectives on social learning theory, as outlined above, are harmonious with *communicative interactions* that I consider central to developing learning capabilities and reflexivity for addressing sustainability issues in a community of practice (see Sections 3.4 and 5.3). In the next section I build on the epistemological perspectives discussed in

Chapter 3 (see Section 3.4) to explore how such development may be achieved within four interrelated dynamics of communicative interactions.

4.4 Developing agential learning capabilities for social change

A social learning theory for exploring organisational learning and sustainability involves developing agential learning capabilities and reflexivity for social change. As already argued in Chapter 3 such development may be achieved through communicative interactions (see Section 3.4). This part of the chapter builds on aspects of Habermasian critical theory discussed in Chapter 3 to offer further epistemological lenses for exploring communicative interactions in the NMK community of practice. The next sections present four interrelated dynamics of communicative interactions that are relevant for developing agential learning capabilities for social change in the context of environmental education and sustainability. These dynamics are promoting collective social action and innovation, enhancing democratic deliberations, fostering critical reflections and strengthening systemic thinking capabilities. The four dynamics form part of methodological principles of critical action research as examined in Chapter 5 (see Section 5.3.1). First, I discuss the dynamic for promoting collective social action and innovation for sustainability in the NMK community of practice.

4.4.1 Promoting collective social action and innovation

According to Dunphy *et al.* (2003), social change processes in the context of sustainability are linked to the capacity of an organisation to act and innovate. Elkington (1999) argues that to survive in an increasingly complex world, organisations need to develop clear and integrated frameworks for collective social action and innovation for sustainability. Through communicative interactions, this study sought to promote collective social action and innovation for sustainability in the NMK community of practice (see Sections 7.5.1 and 8.2.2). Although social action is an integral and indispensable component of organisational learning and sustainability, it means different things to different people (Mezirow, 1991). This study views promoting collective social action and innovation at the NMK, as an evolving product and as an engaging process that integrates theory and practice (see Section 5.3.1). It entails identifying and challenging assumptions and values that emphasise

strategic action with a view to exploring alternatives based on communicative action (see Chapter 8; see also Section 9.3). This requires involving participants in processes of identifying contextual issues for action, developing action plans, acting on the plans and then reflecting on the findings to improve on action as critical action research (see Chapter 6; see also Section 8.2).

Innovation, as used, here implies the "generation, acceptance, and implementation of new ideas, processes, products or services" (Kanter, 1983, p. 21) based on sustainability principles (see Section 7.5.1). Brown and Duguid (1991) consider communities of practice as suitable sites for innovation. They view learning and innovating as closely related forms of agential activity. Innovation for sustainability necessitates a deep understanding of cultural and structural factors that constrain agential learning capabilities for change as sought by this research (see Section 7.2). Engaging actors in deliberating and acting on factors that constrain social change processes through communicative interactions has the potential of developing their capabilities to innovate for sustainability (see Chapter 8).

4.4.2 *Enhancing democratic deliberations*

In Chapter 3 (see Section 3.4.3) I explained that democratic deliberations are oriented towards mutual understanding in which learners are motivated to solve sustainability issues by argument (Habermas, 1996). Most theorists of deliberative democracy argue that under the right conditions, deliberation may expand perspectives, promote tolerance and foster understanding between actors in the context of enabling organisational learning and sustainability (e.g. Chambers, 2003; Cohen, 1997; Dryzek, 2000). Gutmann and Thomson (2004) and Dryzek (2000) identify such conditions as openness, reciprocity, publicness and authenticity. This research promotes such conditions in order to develop the NMK learning capacity to address sustainability issues through democratic deliberations (see Sections 6.3.3 and 8.3.2).

To enhance democratic deliberations aimed at developing agential capabilities and reflexivity for social change, educators need to offer social spaces where sustainability issues can be addressed freely (Freundlieb *et al.*, 2004). I sought to create such social spaces during focus groups and workshop sessions at the NMK (see Sections 5.4.1 and

5.4.2). Enacting communicative interactions that are devoid of social and cultural constraints that may impede free and full participation of actors in social learning processes is a key feature of this critical action research study (see Section 6.3.3). Social learning spaces within communities of practice enable learners to come together and to creatively understand the implications of addressing sustainability issues in their contexts. Furthermore, reflexive and democratic deliberations within social spaces have been known to enable collective learning and innovations in regard to sustainability (Rist *et al.,* 2007).

4.4.3 *Fostering critical reflections and reflexivity*

Fostering critical reflections and reflexivity in a community of practice is one of the dynamics of communicative interactions. I regard reflection as a process in which actors consider assumptions and values that influence their actions in order to understand contextual issues related to organisational learning and sustainability (Preskill & Torres, 1999; see also Section 7.3). On the other hand, reflexivity may be understood as a "heightened awareness of the self, acting in the social world" (Elliott, 2005, p. 153; see Section 5.5.1 for details). Reflection and reflexivity are integral to the critical action research method and epistemology as discussed in Chapter 5 (see Sections 5.3.1 and 5.3.2; see also Section 3.2.3 for Archerian forms of reflexivity). Fostering critical reflections in communities of practice creates the freedom for actors to consider their learning capabilities for addressing sustainability issues through social action (see Section 8.2.2). Although reflection is often viewed as an individual act, the outcomes are enhanced when done collectively, as in this research (Preskill & Torres, 1999).

In this study, reflection involves critical questioning and exploring of new ideas, values and relations towards enabling organisational learning and sustainability at the NMK. Such new ideas, relations and values are aimed at modifying the existing ones towards structural and cultural morphogenesis in an organisation (see Sections 3.3 and 8.2.3). Critical questioning[37] and reflection on organisational experiences have been regarded as a difficult and threatening process as they challenge the status quo (see Hinchey, 2004; Mezirow,

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[37] Critical questioning is questioning that is designed to elicit assumptions, ideas and social relations within a community of practice. According to Mezirow (1990), it involves a set of facilitator skills that include framing provoking questions that are easily understood by actors and introducing intimidating issues in a friendly manner.

1990; see Section 9.3). Mezirow (1991) suggests three types of reflection as *content* reflection, *process* reflection and *premise* reflection (see Section 6.2.3). Content reflection refers to reflection on the content or description of a contextual issue (see Section 6.5.2). Process reflection involves analysing the methods and research techniques used in addressing sustainability issues (see Section 5.4.2). Premise reflection focuses on the underlying assumptions or beliefs within an organisation, as stated in the second research aim of this study (see Section 1.3.1; see also Section 8.2.1).

Chapter 3 (see Section 3.2.3) theorised agency as the creative role of persons and the capacity to choose to use their reflexive powers to either enable or constrain organisational learning and sustainability (see Archer, 2003). Archer (2003) puts forward three forms of reflexivity, as communicative reflexivity, autonomous reflexivity and meta-reflexivity (see Section 3.2.3 for details). Communicative reflexives are regarded as actors in organisations who need others to complete internal conversations. Members of a community of practice fall into this category as they depend on others to enable processes of organisational learning and sustainability (see Section 4.2.2). This study sought to strengthen participant learning capabilities and reflexivity for enabling social change processes and the emergence of organisational learning and sustainability at the NMK. The importance of developing reflexivity within communities of practice is confirmed by the following remarks by Senge *et al.* (1999, p. 9):

> [Actors] start discussing 'undiscussable' subjects only when they develop the reflection and inquiry skills that enable them to talk openly about complex, conflictive issues without invoking defensiveness.

To strengthen reflexivity in a community of practice, actors need to be engaged in reflecting upon their organisational experiences and actions within their organisational and broader contexts (see Chapter 2). Providing opportunities for reflexive deliberations and encouraging research participants to reflect on their learning experiences is a good strategy for developing forms of reflexivity. Techniques for imagining alternative assumptions such, as envisioning or *futures thinking* (Tilbury & Wortman, 2004) is another useful strategy for strengthening agential reflexive powers to enable social change and the emergence of sustainability (see Section 7.3.1). Fostering critical reflection and reflexivity in

communities of practice is essential for enabling members of those communities to come to know and understand themselves (see Section 4.2.2). Knowing ourselves is critical to creating new ideas and social relations that may lead to social change and the emergence of organisational learning sustainability in specific contexts. As Preskill and Torres (1999, p. 103) put it "engaging in critical reflection as a group accomplishes an even stronger community of practice", but this requires strengthening systemic thinking capabilities amongst members of a community of practice, as briefly explained in the next section.

4.4.4 Strengthening systemic thinking capabilities

Understanding complexity is essential to enabling organisational learning and sustainability (see Section 1.5.6). Communicative interactions, as advanced here, acknowledge that the web of social reality in organisations is composed of too many variables to be considered and addressed comprehensively (Kincheloe, 2004; see also Section 9.3). These variables become evident when sustainability issues are understood as morphogenetic relationships (see Section 1.5.4). This is because organisational learning and sustainability is influenced by agential, structural and cultural dynamics that operate in a particular community practice. Actors therefore need systemic thinking skills in order to understand the complex social reality of enabling social change processes and the emergence of organisational learning sustainability. Strengthening systemic thinking capabilities within the NMK community of practice (research participants) involved enhancing intersubjective or social learning processes of addressing sustainability issues through critical action research (see Chapters 6 and 8; see also Section 9.3). Critical action research methodology as applied in this study is consistent with a systemic thinking perspective in addressing sustainability issues in an organisational context (see Greenwood & Levin, 2007).

To end this chapter, I reiterate that pedagogical implications for exploring *organisational learning* and *sustainability* at the NMK require cultivating communities of practice through which social learning processes of change and development can be analysed (see Sections 4.2.2, 4.3.3 and 9.5). The Lave and Wenger communities of practice approach, as explained in this chapter, complements both the perspectives of Archerian morphogenetic approach and Habermasian critical theory. Exploring organisational learning and sustainability in

communities of practice thus embraces the significance of morphogenetic relationships and communicative interactions (see Section 9.5).

4.5   Summary

This chapter has examined both sustainability and organisational learning as processes of organisational change and development in the context of environmental education. The chapter developed further the notion of communities of practice introduced in Chapter 1. I apply the concept of *social learning* to refer to the learning processes amongst actors who seek to improve organisational learning and sustainability practices through collective action. Drawing on business management literature I have offered perspectives and critiques of organisational learning as a concept. The chapter examined the concept of *communities of practice*, as both social learning theory and unit of analysis for exploring morphogenetic processes and the emergence of sustainability in a specific context. It has also critiqued the communities of practice approach for neglecting history, power relationships, language and meaning-making processes in organisational learning contexts. I have presented diverse theoretical perspectives on the elusive concept of sustainability and explained sustainability from both individual and social learning theory perspectives. There is an increasing body of literature in the use of social learning theory to address sustainability issues in the field of environmental education. Drawing on this body of literature, I have provided principles and perspectives of social learning theory for exploring sustainability in a community of practice. The chapter discussed four interrelated dynamics of communicative interactions for developing agential learning capabilities to enable change. These are collective social action and innovation, democratic deliberations, critical reflections and systemic thinking.

Part 3 that follows this chapter discusses the methodology and research process of the study. In Chapter 5, I offer a critical action research methodology for exploring organisational learning and sustainability in a community of practice at the NMK.

PART 3   Methodology and Research Processes

In this part I present the methodology and research processes that underpin the exploration of organisational learning and sustainability at the National Museums of Kenya (NMK). The study uses a critical action research methodology that entails challenging oppressive workings of power in organisations, with a view to exploring democratic possibilities and address the methodological question *How can we access ways of knowing the 'reality' of organisational learning and sustainability?*

I report on cyclical data generation and critical environmental education social learning interventions for addressing the above question towards, enabling social change and the emergence of organisational learning and sustainability at the NMK. I present three broad cycles of inquiry on identifying contextual issues, deliberating and acting on contextual issues, and institutionalising social change processes.

Part 3 contains the following chapters:

Chapter 5   **Critical Action Research Methodology**

Chapter 6   **Research Design and Processes**

Chapter 5 Critical Action Research Methodology

5.1   Introduction

This chapter makes explicit the philosophical framework within which I designed and explored organisational learning and sustainability at the NMK. This enables the evaluation of the research process, methods and outcomes of this study using relevant criteria (Zuber-Skerritt, 2001). As stated in Chapter 1 (see Section 1.4.3), I have drawn upon philosophical assumptions from critical theory and action research in a critical action research methodology for exploring organisational learning and sustainability. This took place in a cultivated community of practice at the NMK. Critical action research methodology as applied here investigates morphogenetic relationships through communicative interactions in a community of practice (see Sections 3.3 and 3.4).

The chapter begins by outlining basic assumptions, the background and critiques of critical theory. I examine critical theory as both process of critique for social change and school of thought. In the second section of the chapter I discuss critical action research as both method of inquiry and epistemology of change. I highlight methodological principles for critical action research and underscore its contribution to organisational learning and sustainability. The third section examines the research techniques that I employed, with a particular emphasis on focus groups and workshops as techniques for conducting this research in a community of practice. I end the chapter with a discussion on how I have ensured quality and validity in this critical environmental education research.

5.2   Critical social research: assumptions, background and critiques

I have located this study within the critical tradition that is historically associated with the activities of the Frankfurt School (Giroux, 2003). Generally, critical social research is oriented to

> challenging rather than confirming that which is established, disrupting rather than reproducing cultural traditions and conventions, opening up and showing tensions in

language use rather than continuing its domination, encouraging productive dissension rather than taking surface consensus as a point of departure (Alvesson & Deetz, 2000, p. 9).

As a critical social scientist or "criticalist"[38] (Kincheloe & McLaren, 2003, p. 452) I was concerned with a critique of assumptions, values and power relations that constrain social change and the emergence of organisational learning and sustainability at the NMK (see Sections 7.4 and 9.3). I explored alternatives based upon critical theory perspectives such as social justice, participation and deliberative democracy (see Section 9.3). Central to this concern, is the argument that exploring *morphogenetic relationships* through *communicative interactions* in communities of practice can deepen context specific understanding of organisational learning and sustainability (see Section 1.1). My interest in critical environmental education research arises largely from a previous study in which, together with teachers, I developed interpretation resources and materials to foster environmental learning in two Kenyan schools (see Atiti, 2003b, 2004). In the next section I introduce basic assumptions of critical theory and how they have informed the study.

5.2.1 Underlying philosophical assumptions

According to Kincheloe and McLaren (2003), it is difficult to explain specifically what critical theory[39] is as there are many critical theories and the critical tradition is always evolving. For Giroux (2003, p. 27) the concept of critical theory refers to both a "school of thought" and a process of critique that can lead to social transformation. Although critical theory does not form a monolithic unity (Held, 2004), criticalists share certain assumptions (see Kincheloe & McLaren, 2003; McLaren, 2003; Morrow & Brown, 1994) that

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[38] Kincheloe and McLaren (2003, p. 452) define a criticalist as a researcher who attempts to use his or her work as a form of social or cultural criticism within basic assumptions of critical theory.

[39] According to David Held (2004), critical theory does not form a unity; it does not mean the same thing to all its adherents. This tradition of thinking can be divided into at least two branches – the first centred around the Institute for Social Research, established in Frankfurt in 1923, and the second around the more recent work of Jürgen Habermas. This study has largely drawn from the latter branch. Guba (1990, p. 23) has preferred the term "ideologically oriented inquiry" to the label critical theory. He identifies neo-Marxism, materialism, feminism, Freireism, participatory inquiry with critical theory as perspectives belonging to ideologically oriented inquiry.

distinguish them from other theorists who emulate the naturalistic objectivism of the natural sciences. I have drawn on the following assumptions of critical theory:

- *All knowledge is essentially mediated by power relations that are socially and historically constituted* (Kincheloe & McLaren, 2003, 2005; McLaren, 2003). I have analysed how power relations as manifested in structural and cultural properties of the NMK, conditioned agential interactions to constrain social change in the context of organisational learning and sustainability (see Section 7.2). The research grounds knowledge in the intersubjective or social learning processes which occur in communities of practice (see Section 3.4.1) and surfaces ways of knowing the reality of social change and the emergence of organisational learning and sustainability as reported in Chapter 8 (see also Section 9.4).

- *A theory of society must be critical of the prevailing social and political order to expose forms of domination and reflect on new possibilities for social change* (Postone, 2004). Through a process of critique, I undertook a critical organisational analysis of the NMK with a view to identifying contextual issues related to organisational learning and sustainability (see Chapter 7).

- *Facts can never be separated from the domain of values or isolated from some form of ideological inscription* (Kincheloe, 2004; Kincheloe & McLaren, 2005). I have incorporated an element of reflexivity (see Section 5.5.1) to interrogate limitations to the research that arose from my positionality (see Section 1.2) and the historically constituted NMK context.

- *Dominant ideologies in society are constituted and mediated through specific cultural practices* (Giroux, 2003). In this study, ideology is considered as an ideational element of culture (see Section 3.2.5). Through envisioning exercises and critical questioning, the research has explored and surfaced participant assumptions and values on sustainability as a form of cultural analysis (see Section 7.3).

- *Language is central to the formation of subjectivity and as such humans possess communicative competence to bring about mutual understanding and action* (Habermas, 1998; see Section 3.4.2). The research analyses situated communicative interactions (Forester, 1983) in order to identify contextual factors, assumptions and

ways of knowing the reality of enabling organisational learning and sustainability (see Chapter 8).

For Max Horkheimer, a theory is critical if it meets the three criteria of "explaining what is wrong with current social reality, identifying actors to change it and providing clear norms for criticism and practical goals for the future" (Bohman, 2004, p. 186). Due to their emancipatory intent, both the Archerian morphogenetic approach (see Section 3.3) and Habermasian critical theory (see Section 3.4), as drawn upon in this research enabled it to meet the aforesaid criteria. The study analyses and explains contextual factors that enabled and constrained social change and the emergence of organisational learning and sustainability at the NMK (see Chapters 7 and 8). It identified a group of NMK employees whom I collaboratively worked with to improve organisational learning and sustainability practices at the organisation (see Section 6.3.2). With this group, I negotiated conditions for conducting communicative interactions as reported in Chapter 6 (see Section 6.3.3). Communicative interactions as environmental education processes sought to develop participants' learning capabilities for addressing sustainability issues at the NMK. However, implementing communicative interactions in one's own organisation is not easy as it turns into a "struggle against our cultural givens" (Popkewitz, 1987, p. 350). Elliott (1991, p. 48; see also Section 6.2.3) alerts us to the challenges of enabling social change in one's own organisation when he says:

> The major problem any cultural innovation 'from within' faces is the failure of the innovators to free themselves from the fundamental beliefs and values embedded in the culture they want to change.

I overcame this problem to the best of my ability and knowledge through self-reflexivity and journaling, as explained later in this chapter (see Section 5.5.1). Furthermore, I was interested in identifying and surfacing the beliefs and values that the participants espoused on fostering a sustainable NMK (see Section 7.3.1).

The next section examines critical theory as a process of critique for enabling social change and the emergence of organisational learning and sustainability.

5.2.2 Critical theory as a process of critique for social change

The concepts of *critique, power relations, agency, structure, culture* and *communicative action* are central to understanding the critical theory perspective adopted in this study. Chapter 3 explained how I have applied the concepts agency, structure, culture (see Section 3.2) and communicative action (see Section 3.4.2) in this research. I now focus on the concepts of critique and power relations.

The concept of *critique* is linked to the ideas of contradiction, crisis and conflict (Postone, 2004). For Marx, critique referred to the dialectical process by which contradictions in society are raised to the level of crisis and resolved through conflict (Delanty, 1999). However, the notion of contradiction is not simply an important aspect of traditional Marxism, it is central to any immanent social critique (Postone, 2004). In this research, the process of critique comprises a critical organisational analysis of the NMK as a social system. This was undertaken through "human interaction within democratic relations of power" (Darder *et al.*, 2003, p. 15). A focus on identifying and acting on contextual issues, as explained in Chapter 7, is connected to the concern of critical theory with a simultaneous *critique* of society and the envisioning of new possibilities (Morrow & Brown, 1994). It is also connected with Archerian morphogenetic approach that explores social and socio-cultural interactions in an organisation as contradictory or complementary. This provides the basis for understanding morphogenetic/morphostatic processes and the emergence of sustainability in a community of practice. Basically, I have understood the process of *critique* as an ongoing one since the emergence of organisational learning and sustainability in communities of practice is not a static or complete condition.

Power as domination and productive relations

One of the basic assumptions of critical theory supports the idea that all knowledge is essentially mediated by *power relations* that are socially and historically constituted (see previous section). In other words, "all knowledge is created within a historical context that gives life and meaning to human experience" (Darder *et al.*, 2003, p.12). Based on this assumption, power relations at the NMK have been understood not only within its boundaries but also within the boundaries of broader historical, political, social and economic contexts as examined in Chapter 2. In my role as a critical educator and

researcher, I sought to understand the different and complex ways in which power operated at the NMK to influence the learning capabilities of participants, to enable organisational learning and sustainability (see Sections 7.2.1 and 7.4.2).

In his seminal work, *Power: a radical view,* Lukes (2005) presents a conceptual analysis of power relations that I found relevant to this study. Lukes elaborates on an approach that examines power within *one-dimensional*, *two-dimensional* and *three-dimensional* views. In the one-dimensional view, power is understood as a product of conflicts between actors to determine who wins and who loses on key sustainability issues in an organisation. Power only appears where there is a conflict and little attention is paid to those whose voices are not represented in the decision-making processes. This view of power cannot reveal the less visible ways in which an organisation may hinder the emergence of sustainability. In the second dimension, power is not only about who wins or loses on key sustainability issues in organisations, but it is also about preventing those issues from being addressed. The analysis of power relations within a two-dimensional view in this study entails examining the participation of employees in *decision-making* processes with regard to addressing sustainability issues (see Section 7.2.1). The reluctance of senior managers at the NMK to address issues related to staff motivation and development is an example of a two-dimensional view of power (see Section 8.4.1).

On the other hand, the three-dimensional view of power incorporates the many ways in which potential sustainability issues are kept out of organisations, whether through the operation of social forces and organisational practices or through decisions of individuals. In this dimension, power resembles the Gramscian notion of *hegemony*[40] (Darder *et al*., 2003). Hegemony is a term derived from the work of Antonio Gramsci (1971) and refers to the ability of a dominant group to exert or maintain control through a combination of overt and subtle mechanisms such as causal powers of structural and cultural properties. Cultural

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[40] Gramsci (1971) used the term *hegemony* to denote the predominance of one social class over others (e.g. *bourgeois hegemony*). This represents not only political and economic control, but also the ability of cooperate agents in an organisation to project their own way of seeing the world so that those who are subordinated by it accept it as *common sense* and *natural*. However, since agents as well as actors are fixed in persons with abilities to be creative and make choices, hegemonic relations involves willing and active consent of the dominated (see Section 2.3.4).

factors such as ideologies and values are important in the understanding of how power operates in organisations to enable or constrain social change processes (see Section 7.2.1).

Although Lukes's (2005) three-dimensional framework of power, as described above, provides a useful way of understanding power relations (see Section 7.2.1), it has been critiqued from a number of viewpoints (Gaventa & Cornwall, 2001). The approach is limited in its understanding of power as a 'power over' relationship (see Section 7.4.2). All the three dimensions of power focus on the oppressive side of power and view it as a resource that senior managers wield over junior employees in an organisation. However, power may be seen as a quality growing from within oneself and not something that is limited by others (Archer, 1995; see also Section 3.2.3 on change agency). It can also be seen as a positive element as in the power to act on contextual issues to enable social change and the emergence of organisational learning and sustainability (see Section 8.4.2). Hayward (1998, p. 2) reconceptualises power as "a network of social boundaries that constrain and enable" social change in organisations. For me, such social boundaries encompass morphogenetic relationships in a community of practice as explored in this study.

Foucault (1977, 1978) views power as productive and relational. In this view, power becomes the "multiplicity of force relations" (Foucault, 1978, p. 92) that constitute social relationships such as those found in the agential, structural and cultural dynamics of an organisation. Foucault (1978) enables us to understand power relations very broadly and yet very finely, as anchored in the multiplicity of what he calls *micropractices*, the social practices that constitute everyday life in organisations. Nonetheless, since Foucault has no basis for distinguishing, for example, dominant forms of power from non-dominant ones, he appears to have endorsed a one-sided, wholesale rejection of modernity (Fraser, 1989). In contrast, the Archerian morphogenetic approach that underpins this study provides a theoretical lens for probing both enabling and constraining power relations in a community of practice (see Sections 7.2.2).

The next section provides a brief account of critical theory as a 'school of thought' to further illuminate a critical orientation to exploring organisational learning and sustainability.

5.2.3 Critical theory as a 'school of thought'

The term *critical theory* has often been historically associated with the activities of the Frankfurt School that were carried out between the early 1920s and the late 1950s. According to Wiggershaus (2004, p. 4) the terms *Frankfurt School* and *critical theory*, are more than simply "paradigms of social science". These terms bring to mind the historical memories of the early twentieth-century debates over the academic significance of Marxism. The activities of the Frankfurt School sought to critically illuminate the great historical changes of the twentieth century while reflexively grounding the possibility of their critique with reference to its historical context (Postone, 2004). The historical developments included the failure of revolution in the West after World War I and the Russian Revolution, the development of Stalinism, the rise of Fascism and Nazism, imperialism and the growing importance of mass-mediated forms of consumption, culture and politics.

The first generation of the Frankfurt School theorists such as Max Horkheimer, Herbert Marcuse and Theodor Adorno (see Rush, 2004 for more details) wrote seminal essays that served as the building blocks for a critical theory of society (Darder *et al.*, 2003). The early critical theorists formulated sophisticated and interrelated critiques of instrumental rationality, the domination of nature, political domination, culture and ideology (Postone, 2004). One of their central values was a commitment to penetrate the world of objective existence to expose the underlying social relationships they often conceal (Giroux, 2003). The Frankfurt School stressed the importance of critical thinking and viewed it as a constitutive element of the struggle for self-emancipation and social change. However, the School remained bound to a Marxist philosophy of history that failed to provide explanatory tools for critiques of social reality and emancipation (Honneth, 1999). The School's turn to Adorno's historico-philosophical negativism contained in *Dialectic of Enlightenment* (Horkheimer & Adorno, 1972) finally marked the historical point at which

attempts to connect critique back to social history failed totally (Honneth, 1999; Postone, 2004).

A second generation of the Frankfurt School represented by Jürgen Habermas has reconstructed and revitalised the critical tradition by bringing it into dialogue with contemporary developments in the social sciences and philosophy (Mendieta, 2005; see Section 3.4 for details on Habermasian critical theory). Habermas developed a social theory that shifts from the Marxist paradigm of production to that of communicative action. Through a theory of *communicative action* (see Section 3.4.2) Habermas has sought to reject the early Frankfurt School's adherence to the philosophy of history and the philosophy of consciousnesses (Hanssen, 2004). This research draws upon Habermasian theories of communicative action and deliberative democracy to locate social learning processes in communicative interactions in a community of practice (see Sections 3.4 and 4.2). Habermas endeavoured to place critical theory on firm epistemological ground, keeping a dialectical relationship between *objectivist* analysis of social systems and subjectivist analysis of action (Calhoun & Karaganis, 2001; see Section 3.4.1). His analysis of society suggests that the power of self-steering systems threatens the communicative achievements of the lifeworld (see Habermas, 1987). In such analysis, systemic powers in organisations such as the NMK acquire independence to constrain communicative interactions aimed at enabling the emergence of sustainability. This perspective is not only deterministic, but also seems to agree with the pessimistic and negativist social theories of the first generation critical theorists highlighted earlier. By drawing on Archerian social realism, as introduced in Chapter 1, this limitation is addressed (see Section 1.4.1).

There is an emerging third generation of critical theorists who, like Habermas, are focused on the conditions necessary for establishing democratic deliberations (see Section 3.4.3). Writers such as Chambers (2003) and Fraser (1997) shift emphasis from mutual understanding to diversity and pluralism in organisations. Through democratic deliberations, the research addresses contextual issues of internal communication and information flow, decision making and leadership, staff motivation and development, financial management and identity and the role of NMK which have no universal answers (Chambers, 2004; see Chapter 8). One of the leading third generation critical theorists,

Axel Honneth (1996, 1999, 2004), proposes a social theory that is based on social relations of recognition and their violation. This theory aims to connect with the agential experiences of shame, anger and resentment which are typical of violations of social justice and democracy in organisations such as the NMK (see Section 8.4.1). Honneth uses the term social *dynamics of disrespect* to move away from the Habermasian notion of communicative action that is conceived primarily in terms of a theory of language. However, the Habermasian notion of communication is *thicker* than Honneth presumes (Rasmussen, 1996). Habermas is aware of the intertwining of communication and recognition, and is sensitive to the ways in which distorted structures of communication have implications for enabling social change and the emergence of sustainability in society.

In summary, this research advances Habermasian theories of communicative action and deliberative democracy as a coherent conceptual framework within which an applied and critical research programme can be undertaken in organisations. It also draws on the work of third generation critical theorists, to move away from a communicative perspective, which emphasises conditions for mutual understanding to one that focuses on conditions for recognition and upholding diversity and pluralism in organisations (see Section 3.4.4). Lotz-Sisitka and Burt (2006) view third generation critical theorists as more concrete in the sense that they deal with context specific sustainability issues. The next section examines critiques of critical theory.

5.2.4 *Critiques of critical theory*

There are a number of critiques of critical theory in the literature. For example, critical theory has been found to be irrelevant to empirical research (Morrow & Brown, 1994). Many of the most prominent critical theorists such as Habermas and Giddens, are known for their lack of interest in empirical work (Alvesson & Deetz, 2000). As a result, critical theory has not clearly associated itself with a specific or unique method that would facilitate the development of a specialised empirical research programme (Morrow & Brown, 1994). For this study, I have drawn upon methodological principles of critical action research to enable me to explore organisational learning and sustainability at the NMK empirically. Basically, critical action research as discussed in the next section is a synthesis of philosophical assumptions from critical theory and action research. Another

critique of critical theory relates to its presentation in writing. The language of critical theory has been critiqued for its elitism and constant use of the masculine pronoun to refer to both male and female subjects (Darder, *et al.*, 2003; Fraser, 1989). Writings on critical theory are densely composed thereby making the critical tradition inaccessible to a large number of people (Carspecken, 1996; Demetrion, 2000). From a feminist perspective, critical theory has been accused of challenging the structures and processes of patriarchy in organisations from a narrow-minded and superficial perspective (see Fraser, 1989).

To address some of the limitations of critical theory, this study has also drawn upon *Archerian social realism* to analyse and explain structural and cultural properties of the NMK as a social system (see Sections 1.4.1 and 7.2). This provides a deeper understanding of structural and cultural factors that condition agential learning capabilities for social change and the emergence of organisational learning and sustainability in a community of practice (see Sections 7.2.2 and 9.2.1). By drawing upon the Archerian morphogenetic approach, I advance Parkin's (1996, p. 435) view that "critical theorists should look to new intellectual sources and methodologies for further inspiration and direction". I have also extended the Habermasian communicative theory of action beyond the linguistic framework, as suggested by Honneth (1999; see Section 3.4.4). In addition, I have employed a social learning theory that embraces both morphogenetic relationships and communicative interactions in a community of practice (see Section 1.4).

5.3   Critical action research as a method and epistemology of change

In this part of the chapter I draw upon philosophical assumptions from critical theory and pragmatism to respectively examine action research as a method of critical inquiry and an epistemology of change. I view action research as critical social research carried out by a group which comprises an *insider* action researcher and members of an organisation, towards improving sustainability practices (Greenwood & Levin, 2007; see Figure 1.1 and Section 6.2.3). I have utilised action research as a method of inquiry to access ways of knowing the social reality of enabling organisational learning and sustainability through cyclical processes of planning, action and reflection (see Chapter 6). At the same time, I have employed action research as an epistemology of change to facilitate social learning

processes of change and development (see Chapter 8). Action research, as applied here, rests on social learning processes of change and development in a community of practice. It explores morphogenetic relationships through communicative interactions in communities of practice (see Section 6.3 and 6.4). Consequently, action research, as a dynamic and flexible research method of critical inquiry, has enabled me to explore both issues of *knowing*, and issues of *being* and *becoming* in the context of enabling organisational learning and sustainability at the NMK (see Chapters 8 and 9).

The next sections consider the methodological and epistemological basis of critical action research for exploring social learning processes in a community of practice. I first outline the diverse origins and varieties of action research found in the literature. I then delineate key features and methodological principles of critical action research that have informed this critical social research. Finally, I locate critical action research within a pragmatist epistemology and then underscore its contribution to organisational learning and sustainability.

5.3.1 Action research: origins, features and methodological principles

This section outlines the origins and varieties of action research with a view to delineating key methodological principles for the study. Essentially, action research is a research approach that focuses on simultaneous action and research in a collaborative manner (Coghlan & Brannick, 2005). According to Reason and Bradbury (2001, p. 2), action research is "participative research, and all participative research must be action research". This implies that action research is a generic term that covers many forms of participative and action-oriented research (Coghlan & Brannick, 2005; Ellis & Kiely, 2000; Kakabadse *et al.*, 2007). See Burns (2005) for details on shifts in conceptualisations of action research. Action research covers a wide variety of practices and ideological positions that focus on issues of power relations, social change and development, and tackle oppressive workings of power in organisations (Greenwood & Levin, 2007; Ellis & Kiely, 2000).

Due to its wide variation, action research has diverse origins with no one coherent history found in the literature (Reason & Bradbury, 2001; see Greenwood & Levin, 2007 for a history of action research). However, many writers (e.g. Burns, 2005; Greenwood & Levin,

2007; Reason & Bradbury, 2001) trace the origins of action research to the work of Kurt Lewin (1946, 1948), even though Corey (1953) mentions Collier's (1945) research on American Indians as an early example of action research. Collier argued for a joint approach by researchers and administrators that was "action-research, research action" (*ibid.*, p. 300). Lewin (1946), a social psychologist interested in improving people's work and living conditions believed strongly in democratic decision-making, a more equitable distribution of power, and that practical problems were a never-failing source of ideas and knowledge (see also Dewey, 1927). Action research also has its origins in the contemporary critique of positivist science and scientism (see Carr & Kemmis, 1986; Kemmis & McTaggart, 2005). Some action research approaches have origins in sociology and focus on how communities as socio-political systems enact social change (see Fals Borda, 2001). These approaches address structural emancipatory issues relating to education, social exclusion and power control (Coghlan & Brannick, 2005). Other action research approaches have their origins in applied behavioural science and have developed in the organisational context (Adler *et al.*, 2004; Coghlan & Coughlan, 2003; Foster, 1972; Schein, 1987, 2001). Parallel to this approach is one that focuses on relationships both in the workplace and between social partners in regional development (Gustavsen, 1992, 2001). Within this approach the core contribution of research is to create relationships between actors, and social spaces where they can meet in democratic dialogue (Gustavsen, 2001). In what follows I briefly sketch key features of some action research approaches to further underscore their diverse origins and different conceptualisations.

Educational action research

Action research is popular in educational research for improving practices and enhancing the professional development of practitioners (Atiti, 2003b, 2005; Burns, 2005; Carson, 1990; John Elliott, 1991; Kemmis, 1996; Ziegler, 2001). Educational action research is grounded in Dewey's (1938) philosophy that focuses on the role of human experience in knowledge generation (Herr & Anderson, 2005; see Section 5.3.2). Diverse educationally centred action research approaches occur in the literature (Greenwood & Levin, 2007; see McTaggart, 1991 for origins of educational action research). This study is an example of educational action research within a critical perspective (see Carr & Kemmis, 1986; Esposito & Evans-Winters, 2007; Kincheloe, 2003). Critical action research, as an

approach to educational action research, is strongly represented in the environmental education and sustainability literature (e.g. Atiti, 2004, 2005; Hart, 2007; Lotz, 1996; Tilbury, 2004). Critical action research suggests that all educational research should be democratic, equitable, liberating and enhancing (Mills, 2007).

Participatory (action) research

Participatory research is an alternative philosophy of social research, often associated with social transformation in underprivileged communities (Coghlan & Brannick, 2005; Fals Borda, 2001; Freire, 1972; Kemmis & McTaggart, 2005). It encompasses a variety of approaches that engage research participants directly in addressing issues such, as those of sustainability (Boser, 2007; Greenwood & Levin, 2007). Participatory research is distinguished by collective ownership of research projects, community-based analysis of social problems, and an orientation towards community action (Kemmis & McTaggart, 2005). Many of the liberation or emancipatory action research approaches are variations on participatory research (Coghlan & Brannick, 2005). They include participatory action research (Kemmis & McTaggart, 2005), community-based research (Freire, 1972) and critical action research (Carr & Kemmis, 1986). This study embraces critical action research that is based on tenets of critical social theory (see Section 5.2). It focuses on concerns of power and powerlessness and how marginalised groups are excluded from decision-making (Fals Borda, 2001; see Section 8.3).

Action science

Action science is an approach to action research that attempts to bridge the gap between social research and social practice (Friedman, 2001). It is associated with the work of Chris Argyris (2004; see also Argyris *et al.*, 1985; Friedman, 2001). Action science emphasises on the study of practice in organisational settings as a source of new understandings and improved practice. According to Friedman (2001), action science is distinguished by four features: creating a community of inquiry within a community of practice; building theories in practice; combining interpretation with rigorous testing and creating alternatives to the status quo and informing change in light of values freely chosen by social actors. The first and last features are central to this research (see Sections 6.3.2 and 7.3). The participants in this study operated as a community of practice at the NMK and

challenged assumptions underlying the NMK as a social system. The participants and I explored alternative assumptions through democratic deliberations in focus groups and workshops (see Sections 5.4.1 and 5.4.2).

Action learning

Action learning has its origins in the work of (Revans, 1982) who viewed conventional approaches to management inquiry as inadequate in solving issues such as those related to sustainability in organisations. This approach seeks to bring people together to learn form each other's experiences (Kemmis & McTaggart, 2005). It emphasises studying one's own situation, illuminating what the organisation is trying to achieve, and working towards enabling social change processes and the emergence of organisational learning and sustainability (see Section 6.2.2; see also Chapter 8).

Cooperative inquiry

Cooperative inquiry or human inquiry is regarded as another variety of action research (Heron & Reason, 2001; Reason, 1988). A core value focus of cooperative inquiry is to do research *with* people instead of *on* people. This value also applies to the critical action research that underpins this study. Cooperative inquiry involves two or more people researching a topic through their own experience to gain a deeper understanding of their contexts (Heron & Reason, 2001), as evident in this research (see Chapter 8).

The varieties of action research indicate diversity in theory and practice among different approaches. Action research draws from pragmatic philosophy (see Sections 1.4.2 and 5.3.2), critical thinking (Carr & Kemmis, 1986), liberationist thought (Fals Borda, 2001); systems thinking (Flood, 2001) and, more recently, complexity theory (Reason & Goodwin, 1999). This study (see Section 3.2.1), is not focusing on differences between these theoretical perspectives, but rather the core values and methodological principles that are central to action research approaches. I have focused on the congruence of action research approaches to explore organisational learning and sustainability at the NMK within a critical perspective. Consequently, I use critical action research as a multidisciplinary, contextual and holistic research method for exploring organisational learning and sustainability in communities of practice. At this point I highlight features and

methodological principles of critical action research that are harmonious with philosophical and theoretical perspectives underpinning this study (see Chapters 3 and 4).

Features and methodological principles of critical action research

This critical action research is *critical* in the sense that it attempts to distil the historical processes (Carr & Kemmis, 1986) that enhance or constrain agential learning capabilities for addressing sustainability issues in communities of practice. Such distillation allowed an engagement in the critical reconstruction of possibilities and desires for social change and the emergence of sustainability at the NMK. This entailed empirically investigating contextual issues related to organisational learning and sustainability, as presented in Chapter 8. Critical action research as a dynamic and flexible method for exploring organisational learning and sustainability rests on the following eight methodological principles[41] (see Greenwood & Levin, 2007; Herr & Anderson, 2005; Somekh, 2006; Reason & Bradbury, 2001):

1. *Integration of action, research and participation*

    Action research is a combination of action, research and participation through a series of flexible cycles (Greenwood & Levin, 2007; Somekh, 2006). This study engaged participants in three broad cycles of inquiry (see Section 6.2.3) with each comprising cyclical processes of i) planning collective action to improve sustainability, ii) acting and generating data on organisational learning and sustainability, iii) evaluating social learning outcomes as a basis for further planning and further data generation (see Section 6.2.3; see also Kemmis & McTaggart, 2005; Somekh, 2006). These cycles are harmonious with Archerian morphogenetic cycles that I explained in Chapter 3 (see Section 3.3.1). Since this study was an integral part of ongoing broader organisational change processes at the NMK (*core* action research project) that involved the research group, the cyclical processes did not end with the completion of data collection activities at the organisation (*thesis* action research project).

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[41] Some of these principles also constitute epistemological foundations of critical action research that I highlight in Section 5.3.2. These include the focus of this critical action research inquiry on addressing context specific sustainability issues at the NMK, using diversity in participant experiences and capabilities as an opportunity for the enrichment of improving sustainability practices and the use of communicative interactions as environmental education processes (see Section 3.4; see also Greenwood & Levin, 2007).

2. *Collaborative inquiry into own organisation*

Action research is carried out through the collaborative democratic partnership of participants whose roles and relationships are fluid to maximise reciprocal support (Somekh, 2006). In my role as an insider critical researcher, I conducted this study in collaboration with a group of fellow employees at the NMK (see Coghlan & Brannick, 2005; Section 6.2.3). As members of a community of practice at the NMK, we sought to improve organisational learning and sustainability practices in our organisation (see Section 6.3.2). To address issues of power relations that surround collaborative inquiry in one's own organisation, I negotiated conditions of participation with the research group as reported later in Chapter 6 (see Section 6.3.3). I sought to establish and maintain research relationships that were based on "equality, harmony, acceptance, cooperation and sensitivity" (Stringer, 2007, p. 28).

3. *Context specific understanding and ways of knowing*

Critical action research is context bound and addresses sustainability issues holistically to generate a systemic understanding of a specific organisational setting (Greenwood & Levin, 2007; Gummesson, 2000; see Section 9.4). It enabled me to undertake a critical organisational analysis of the NMK as a social system (see Sections 6.3.3 and 7.2). This developed a context specific and critical understanding of factors that enabled and constrained social change and the emergence of organisational learning and sustainability (see Chapters 7 and 8). In addition, critical action research method made it possible to access different ways of knowing reality of organisational learning and sustainability (see Section 9.4).

4. *Development of agential learning capabilities*

Critical action research contributes to human development by improving learning capabilities (reflexivity) to generate new ways of knowing (Reason & Bradbury, 2001). Through a combination of research with reflection, this study sought to develop participant learning capabilities for addressing sustainability issues in their own context (see Chapter 8). This involved promoting collective social action, enhancing democratic deliberations, fostering reflexivity and strengthening systemic

thinking within the research group as a community of practice at the NMK (see Section 9.4).

5. *Establishment of collective vision of social change and sustainability*

   Collective learning for social change in critical action research is "grounded on a social and educational vision of justice and equality" (Kincheloe, 2004, p. 6). The research aimed to promote principles of sustainability such as social justice and democracy, at the NMK in collaboration with the research participants. Participants assumed the roles of change agents and created personal visions that enabled us to take a stand for a sustainable future NMK (see Section 7.3.1). This provided us with the drive to move the change process forward as positively as possible, while deepening our understanding of the morphogenetic and morphostatic processes at the NMK. The participants and I challenged assumptions and values that contradicted sustainability principles and explored democratic, pluralistic and more power-sharing alternatives (see Chapter 8; see also Section 9.3).

6. *Incorporation of high levels of reflexivity*

   Critical action research is a reflexive method that ensures a "heightened awareness of the self, acting in the social world" (Elliott, 2005, p. 153). It involves sensitivity to the role of the self in mediating the entire research process (Somekh, 2006). Through critical action research I was able to engage the participants in exploring organisational learning and sustainability. I *situated* myself and my interpretations of social learning outcomes by "reflexively examining my positionality" (Rose, 1997, p. 305) and those of the participants (see Sections 1.2 and 5.5.1). The participants and I were *insiders* making attempts to improve organisational learning and sustainability practices in our own organisation.

7. *Gaining broader perspective of social change and sustainability*

   Critical action research positions the inquiry in an understanding of broader contexts that influence agential activities with regard to the emergence of organisational learning and sustainability (Somekh, 2006; see Chapter 2). This has allowed me to locate the research within the broader Kenyan context as described in Chapter 2.

Structural and cultural factors that enabled or constrained the learning capabilities of the participants for social change were enmeshed within the broader Kenyan context. The context consists of historically constituted interactions between the biophysical, political, social and economic dimensions of the environment (see Section 2.2).

8.   *Enhancement of diversity*

Critical action research engages different ways of knowing drawn from diverse fields and theories (Somekh, 2006). It treats the diversity of experiences and the capabilities of research participants as opportunities for the enhancement of processes of social change and the emergence of sustainability (Greenwood & Levin, 2007). The research participants in this study were recruited from different fields at the NMK (see Section 6.3.2). The different perspectives they brought into the study became an integral part of data analysis and interpretation of findings. I also utilised different theories (see Section 1.4) when analysing and interpreting data, as described in Chapter 6 (see Section 6.6). For example, I drew on systems theory and the Archerian morphogenetic approach to explain factors that influenced social change and the emergence of organisational learning and sustainability (see Chapter 8). I also incorporated Habermasian theories of communicative action and deliberative democracy to understand ways of knowing the social reality of enabling organisational learning and sustainability.

In the next section I shift focus to the epistemological foundations of critical action research by building on Deweyan pragmatism introduced in Chapter 1 (see Section 1.4.2).

5.3.2 Epistemological foundations of action research

Deweyan pragmatism introduced in Chapter 1 (see Section 1.4.2), provides the epistemological foundations of critical action research as employed in this study. It is consistent with principles of general systems theory that underlie critical action research and the Archerian morphogenetic approach to organisational analysis (see Sections 3.3.2 and 4.4.4). Greenwood & Levin (2007, p. 62) acknowledge that Dewey's epistemology, "with its linkage of knowledge and action, its connections among knowledge, action, community, and democracy" is essential for critical action research. John Dewey's (1938)

concept of *growth* offers a fruitful angle for developing agential learning capabilities to address sustainability issues in communities of practice.

Dewey defines growth as the reconstruction of human experience through critical reflection and insightful action (Demetrion, 2001). According to Dewey (1938, p. 47), "every experience should do something to prepare a person for later experiences of a deeper and more expansive quality". Such growth or reconstruction of organisational experiences can contribute to personal and collective fulfilment, to enable social change processes and the emergence of sustainability in a community of practice (see Chapter 8). Democracy is the end-point of Dewey's concept of growth or reconstruction (Demetrion, 2000). As a result, Dewey's concepts of experience, reflection, growth and democracy, within a community of practice, are central to a critical action research inquiry into organisational learning and sustainability. This study made attempts to reconstruct basic assumptions and values underlying the NMK, to enable social change and development (see Section 9.3). It has developed the learning capabilities of participants for addressing sustainability issues through communicative interactions as interventions for *growth* (see Section 9.4). Many authors have drawn upon tenets of critical action research and Deweyan pragmatism to advance a social learning theory for organisational learning and sustainability (e.g. Dyball *et al.*, 2007; Elkjaer, 2003; Hart, 2007; Tilbury, 2007) as explained earlier in Chapter 4 (see also Sections 4.2.2 and 4.4.3).

As a pragmatic epistemology of change, critical action research plays an important role in organisational learning and sustainability programmes (Greenwood & Levin, 2007; Lund-Thomsen, 2007; Somekh, 2006; Zuber-Skerritt, 1996, 2001). It contributes to organisational change, learning and innovation (Dick, 2001; Greenwood & Levin, 2007; Reason & Bradbury, 2001). Elden and Levin (1991) argue that workplaces can be powerful sources of organisational learning for empowerment and democratisation through action research. In critical action research for organisational change learning is usually transformational and transformation is both personal and organisational (Passfield, 2001; Zuber-Skerritt, 2001). According to Dick (2001, p. 22) action research, in its action orientation, is part of the same tradition as organisational development. Much of the organisational development literature is set implicitly or explicitly within an action research

framework and draws on the argument that people are more committed to those changes that they themselves plan and implement (*ibid*.). However, this study challenges *rationalist* approaches that are associated with various approaches to organisational development for their assumptions of voluntarism and *free choice* (see Caldwell, 2006; see Section 3.2.1). These approaches view the action researcher as an expert and rational actor, who defines, directs and manages change even in the face of organisational resistance and structural and cultural constraints. The next section develops this point further and discusses some critiques of action research in general and critical action research in particular.

5.3.3 *Critiques of critical approaches to action research*

According to McTaggart (1996), much of the critique of critical approaches to action research is based on theoretical and metatheoretical positioning. For example, critical action research has been critiqued for drawing upon writings on Habermasian critical theory and Deweyan pragmatism that are largely inaccessible to most practitioner-based researchers (Demetrion, 2000; see also Section 5.2.4). Conceptualising critical action research on the assumption that the truth of social reality resides outside the contexts of participants until they receive emancipatory knowledge (Carr & Kemmis, 1986), has been heavily critiqued by postmodernists (e.g. Flax, 1990). McTaggart (1996) argues that critiques of the emancipatory intent of action research are based on an implicit assumption that *emancipation* is some ideal state to be achieved. Furthermore, there is too much baggage attached to the notion of emancipation. This study avoids making claims of aspiring to *emancipate* research participants from structural and cultural conditioning at the NMK. It does however; make a strong argument for the continuing relevance of critical perspectives in environmental education research, without idealising the emancipatory intent of critical action research. Greenwood and Levin (2007) censure action researchers who idealise and moralise aspirations for participation and democratisation in their work. They caution that

> Participation and democratization themselves are not panaceas; they will not solve all the [sustainability issues] of the world. They do not have magical effects in transforming the world into a fairer, better, and more sustainable place. Participation is always attached to politics. … Participation does not prepare the ground for democracy unless it creates real and sustainable venues for power

sharing that increases the local participants' ability to control their own situations (*ibid*., p. 255).

This research addresses this concern by locating participation and democracy within structural and cultural factors that influenced the participant learning capabilities for addressing sustainability issues at the NMK. This is because conditions for participation and democracy at the NMK were structurally and culturally bound (see Chapters 7 and 8).

Generally, action research has been critiqued for its lack of standards for judging quality and rigour (see Burns, 2005). For example, Argyris (1989, p. 612) points out that in action research "the challenge is to define and meet standards of appropriate rigor without sacrificing relevance". Other critiques relate to the over-involvement of the critical action researcher, leading to personal bias, the lack of clearly defined procedures for data analysis, and the time constraints posed by lengthy procedures of action research (Burns, 2005; Hall, 1996). Section 5.5 of this chapter discusses how I addressed these concerns and critiques. A mechanical approach to action research following the Lewinian (1946) cycles has been critiqued for reducing action research to a procedure. McTaggart (1996, p. 248) warns that slavishly following the "action research spiral does not amount to doing action research". Related to this is Caldwell's (2006) critique of Lewin's legacy in action research approaches to organisational development that identify intentional action and agency with *rationality*, *expertise*, *autonomy* and *reflexivity*. Organisational change is conceived as planned change, facilitated by an autonomous, expert and reflexive change agent or action researcher (see also McTaggart, 1996).

Having discussed critical action research as my preferred method of inquiry and epistemology of change, I present the various research techniques that I utilised to access ways of knowing the reality of enabling organisational learning and sustainability.

5.4   Research techniques

According to Creswell (2003), qualitative research techniques involve four basic types: observations, interviews, documents and visual images. McKernan (1991) identified the use of narratives such field notes, journals, diaries and analytical memos as action research

techniques that can provide opportunities for critical reflection. I have drawn on these techniques to access empirical evidence on organisational learning and sustainability during the three broad cycles of inquiry reported in Chapter 6 (see Sections 6.3, 6.4 and 6.5). This part of the chapter discusses various research techniques I employed to generate empirical evidence on organisational learning and sustainability. These are focus groups, workshops, use of a researcher journal, semi-structured interviews, participant observation, photography, email communication, document reviews and informal meetings. Focus groups (FG) and workshops (W) were the main research techniques for accessing social reality on organisational learning and sustainability at the NMK. As "collectivistic" research techniques (Madriz, 2003, p. 364), focus groups and workshops are central in accessing evidence on the reality of enabling organisational learning and sustainability. This is because they create multiple lines of communication and offer participants a safe environment for sharing their organisational learning and sustainability experiences.

The participants in this study were drawn from the NMK, with participation occurring at two levels (see Section 6.3.2 for details on recruitment). At the first level were members of the research group, participating as *actors* within a community of practice (see Appendix 1, p. 396). Appendix 1 lists these members, indicating their pseudonyms based on the date of recruitment (e.g. A1 was the first to be recruited), position and professional abilities and number of meetings attended. Letter A that denotes *actor* is used to the conceal identities of these participants. At the second level were non research group participants who participated as *corporate agents* (see Appendix 2, p. 399). Appendix 2 lists corporate agents indicating their pseudonyms based on their level of influence, position and professional abilities and meetings attended. I apply letter C that signifies *corporate* to conceal the identities of this group. See Section 3.2.3 for Archer's (1995) distinction between *actors* and *corporate agents*.

The next section examines how I used focus groups to generate data as interventions for developing participant learning capabilities for enabling social change and the emergence of organisational learning and sustainability at the NMK.

5.4.1 Focus groups

Since the 1980s there has been an increase in the use of focus groups to research social issues (Madriz, 2003; Morgan, 1997). I used focus groups as the main research technique to gather empirical evidence on organisational learning and sustainability through group interaction (Morgan, 1997, 1998). As contextual interactive group discussions, focus groups are used to explore a specific set of issues (Kitzinger & Barbour, 1999) and if held on a regular basis can become a social and political forum in their own right (Baker & Hinton, 1999). From a critical theory perspective, focus groups have been used to advance social justice as they serve to expose and confirm people's experiences of domination (Madriz, 2003). They offer a social context for meaning-making and shifting the balance of power from the researcher towards the participants (Wilkinson, 1999). I highlight how I drew upon focus groups as a research technique to address sustainability issues at the NMK with a group of fellow employees.

A total of 16 focus groups, each lasting approximately three hours, were held during the course of this study (see Sections 6.3.3, 6.4.2 and 6.5.2). I have used the acronym FG when referring to the 16 focus groups. For example, FG1 denotes the first focus group. In each focus group meeting, I issued participants with a framework (see Appendix 3, p. 401 for an example) that guided deliberations and interactions. I used the framework in the context of Paulo Freire's (1985) notion of *generative themes*. As generative themes, the framework enabled the participants to *read* the complex reality of the NMK. The framework encouraged active participation of the participants through guiding questions. However, I used guiding questions flexibly to allow for open-ended communicative interactions. Apart from making observation notes, I always had a team member taking notes of our discussions. During the focus group meetings, I asked questions that were aimed at engaging the participants in critically reflecting on the research process and their organisational experiences. I audio-recorded deliberations and also captured participant interactions on a digital camera.

According to Stringer (2007), the most successful and productive research occurs where research participants are provided with opportunities to deliberate extensively about their experiences and perceptions. The focus groups, as a research technique provided the

participants with such opportunities. The following reflective comments by A3, A9 and A12 on what they liked best about FG4 reconfirm this claim (see also Section 8.2.2):

> There was free exchange of information including arguments and debate. (A3)
>
> Participation was high; team members expressed their sincere feelings … the issues being discussed were real, practical and timely. (A9)
>
> It was more intense and made one to think deeply about the issues at hand. (A12) (Participant reflections from FG4)

In addition A4 liked FG8 deliberations for enabling 'free flows of ideas, honest and candid observations, well thought and articulate arguments'. For A19, the heated arguments that featured during FG8 were signs that the issues of decision-making and leadership 'are serious and require urgent attention'. A15 commenting on FG8 said that the focus groups generated 'a lot of enthusiasm and contributions from all members'. As a non-hierarchical research technique, focus groups reduced my power and control and provided opportunities for free-flowing and interactive exchanges of organisational experiences.

Other than providing opportunities for extensive and intensive deliberations on sustainability issues, the use of focus groups as a research technique, offers a number of advantages. Due to their flexibility, focus groups render the research process more accessible, thereby allowing the generation of large amounts of data within a short time (Madriz, 2003; see Chapter 6). For me, they opened up possibilities for collaboration amongst research participants who were drawn from different departments. This claim is supported by A2 when she said that focus groups 'enabled people from various fields to interact freely and learn from each other' (FG4; see Appendix 1, p. 396 for profiles of the research group). Focus groups therefore contributed to team-building that fostered trust and confidence amongst the research group (A4, FG4).

Central to this research, deliberations in focus groups sessions triggered shifts in participant thinking (Barbour, 1999) that contributed to some of the social learning outcomes presented in subsequent chapters. Nonetheless, focus groups, as a research technique, offer some challenges. For instance, group interactions and deliberations are dependent on the skills of the facilitator (Morgan, 1998). At the onset of this study, I had little experience in

conducting focus group sessions within an organisational context. I also experienced a reduced influence during the research process as more weight was given to the participant opinions. Interaction between the research participants also decreased the amount of interaction between myself and the focus group members. The challenges I experienced, that point to the disadvantages of using focus groups are summarised by the following reflexive comments from the participants:

> The role of the moderator should have been replaced to that of chairman to control the members' contribution to avoid domineering by few vocal speakers. (A7)
>
> I would have liked to see a systematic way where there is focus without deviating. (A15)
>
> The chairman today was not very visible – the discussion controlled itself. (A9)
>
> There was a tendency to go out of topic which took a lot of time though it was informing. (A16)
> (Participants reflections from FG8, 09/02/06)

The following suggestion by A14 during FG8 enabled me to address some of these challenges:

> To be able to cover all topics, be time conscious and give everyone a chance to talk as in going round the table. Everyone comments for a minute or two then open up the floor for about ten minutes.
> (FG8, 09/02/06)

I implemented this suggestion in the subsequent focus groups to avoid the 'domineering by few vocal speakers' (A7). This increased the levels of participation during focus groups. The following reflective comments by A2 and A6 substantiate this claim:

> I participated more that as in other previous focus group meetings. Giving the participants time for sharing their ideas ensures that some group members do not dominate the discussion. (A2)
>
> I found myself participating more than as in the previous focus group meetings. This was due to the … initiative suggested by [A14]. (A19)
> (Participant reflections from FG9, 16/02/06)

Interestingly, A14 reflected that her level of participation during FG9 remained the same as that in FG8. The use of workshops as reported in the next section further addressed the challenges of employing focus groups as a research technique.

5.4.2 Workshops

As a research technique, workshops provided me with useful forums for actively engaging the research group in in-depth deliberation of contextual issues identified at the NMK. Unlike focus groups, workshops offered opportunities for fostering dialogue between the research group members and the top NMK management. The workshops were more structured (see Appendix 4, p. 402 for workshop programme) and longer in duration. I have used the acronym W, when making references to workshop data. I held a total of four workshops as shown in Table 5.1.

Table 5.1   Research workshops held during the study

Workshop	Date	Theme & research activities	Participation	
			Members	Others
1. W1	12/04/05	*Start-up workshop & introduction to the study* • Negotiated terms of participation • Identified contextual issues • Envisioned a sustainable future NMK	12	1
2. W2	03/03/06	*Changing patterns of thinking* • Built a shared vision on the Museum in Change process • Exposed and challenged assumptions that hinder enacting systemic changes • Promoted social learning through dialogue	15	10
3. W3	28/11/06	*Institutionalising change and sustainability* • Explored tools and skills for institutionalising social change processes • Promoted team learning through dialogue and sharing of critical reflections	13	2
4. W4	01/03/07	*Validation workshop* • Identified key findings from the study • Made recommendations for further change	16	1

All four workshops followed a similar structure and process: introduction and ice breaking, deliberation on key issues, group discussions and dialogue and evaluation and reflecting on outcomes. As in focus group meetings, I audio-recorded verbal expressions using a digital

voice recorder and took photographs of sessions. I also made observation notes in a field note book on communicative interactions that took place.

The use of workshops, as a research technique, was successful in developing the learning capabilities of the participants for addressing sustainability issues (see also Section 8.4.2). Workshop sessions addressed many sustainability issues and fostered dialogue between the participants and the NMK top managers. The following evaluative comments from A5, A7, A12 and A16 on the high points of W2 substantiate this claim:

> [My high point was] …the envisioning of the Museum in Change with the in-depth insight from [C1] which covered basically all the sub-sections. (A5)
>
> I was very impressed by the way [C1] handled the issues of the past and the Museum in Change; the resource person [C4] in our group on finance was very open and ready to accommodate input from group members. (A7)
>
> The presentation [by C1] brought out the points very clearly and made me understand some critical issues from an administrative point of view; [C4] also cleared some [budgeting issues] I never understood. (A12)
>
> The confirmation from the 'top' managers that the inevitable change was about to take place at the NMK. (A16)
> (W2 evaluation data, 08/03/06)

These evaluative comments support the argument by critical realists that the extent to which actors can enable social change depends on their structural location in an organisation (see Section 3.2.4). C1 (Director General) and C4 (Financial Controller) had certain powers at their disposal to enable social change that the research participants and I did not have. Evaluative comments from W4 confirm that the workshops fostered democratic deliberations amongst participants as members of a community of practice (see Section 3.4.3). For example, 'as a team we learnt that we are all leaders in our various capacities' (A2). A19 reflected that 'good governance starts with me and I can make a difference' (W4). Participants such as A10, learned about the importance of diversity and pluralism when reflecting that 'people have different ideas; appreciating individual differences is important'. According to A16, 'for one to succeed, you need to *own* a process and become a team player from the initial stages' (W4).

However, I experienced some challenges in using workshops as a research technique. Due to their intense nature, there were cases of information overload and fatigue, in the participants. Unlike focus groups, workshops offered me few opportunities to correct problems that arose, since sessions could not be repeated. In addition, limited time (A2, A3, A15 and A18) constrained in-depth deliberations on sustainability issues, given that the workshops drew participants outside the research group. The other challenge was in ensuring the participation of the NMK top management team. Whereas the Director General (C1) attended all the workshops except for W1, not all members of the top management team found time to do so (see Appendix 2, p. 399 for corporate attendance). For example, even though the participants were eager to have dialogue with C3 on issues of staff motivation and development, he was always unavailable for the workshops. C3 was the acting Director of Administration and Human Resources at the time of this study. His participation in W2 was more of a *technical appearance* than genuine participation as he even delegated to A20 (Training Officer) the task of responding to participant questions on issues related to staff motivation and human development. This elicited the following evaluative comment from A12: 'The Director of Administration could have given some time to the workshop discussions. That was an anticlimax!!' In the same vein C5, the NMK Legal Officer and a member of the Directors Executive Committee (DEC), reflected that 'there was a lack of serious participation by the NMK Directors'. According to A18, 'the whole DEC should have attended and not sent their representatives as we were discussing issues of importance'. These evaluative comments by A12, C5 and A18 confirm that the participants in this research were not necessarily equal in their agency. This is because the DEC members had more access to the structural resources and powers for enabling social change processes at the NMK (Archer, 1995; see Section 3.2.4).

5.4.3 Keeping a researcher journal

As a research technique, a researcher journal is a tool for self-development since its primary audience is the reflexive self (Elliott, 1993). In this research I wrote a detailed portrait of all research events that included factual information about events, dates of meetings and people involved, research schedules and my own reflections in a research journal (McNiff *et al.*, 2003). At the start of the study, I recorded my reflections manually in an A4 note book. Later in the study, I started keeping an electronic journal in which I

found it much easier to record research activities and reflections. Journal writing contributed to reflexivity and enhanced the quality of the research as explained in Section 5.5.2. Coghlan and Brannick (2005) acknowledge that journaling is an important research technique for learning to reflect on one's biases and contextual factors. The following journal entry confirms this:

> It is emerging that many members will not attend FG7. How come few members respond to emails or text messages? This week, only A19 emailed me confirming attendance of FG7. What about the others? Today, I have learned that A4 and A9 will be conducting an interview; A3 is in a workshop, A7 is on leave and A16 is way. A17 rarely confirms attendance. I am likely to have less than 10 members attending FG7. I am now experiencing the challenges of using focus group as a research technique.
> (Journal reflection, 09/11/05)

As shown by this journal entry, journaling enabled me to reflect on the research process and to interrogate my interactions with the participants.

5.4.4 Semi-structured interviews

Interviews are a popular and widely used research technique for generating data (Burns, 1999). In the structured or formal interviews, the action researcher works through a list of pre-planned questions rigidly. Semi-structured interviews are open-ended and therefore offer much greater flexibility. I used this research technique on a limited basis as it did not offer multiple lines of communication. I only held two interviews (I_1 and I_2) to confirm and deepen some of the findings from workshops and focus groups (see Sections 6.4.2, 8.2.3 and 8.4.1). The first 30-minute interview (I_1) was on with C5 in her office on 16/12/05. C5 was the NMK Legal Officer and also a member of the Directors Executive Committee. C5 shared her views on a number of issues that included decision-making processes, communication, the Heritage Bill and budgeting. The second interview (I_2) was with C12, a Communication Officer at the Public Relations Department. The interview with C12 took place in her office on 09/02/06 and lasted for 30 minutes. C12 declined to have her voice recorded. I_1 and I_2 data confirmed some of the contextual factors that enabled or constrained internal communication and staff development at the NMK (FG4, FG11 and W2; see also Sections 8.2.1 and 8.3.1).

5.4.5 Participant observation

According to Burns (1999), participant observation involves entering the research setting and observing oneself, as well as others in that setting. Action research provides a systematic and rigorous way of making participant observations as a research technique for generating data (Mills, 2007). In this study, I was both a participant and researcher in exploring organisational learning and sustainability (see also Section 6.2.3). By virtue of being a participant, I actively observed interactions, relationships, actions and events during research sessions. I documented observations in the form of field notes and also as reflections in the researcher journal. Focus group and workshop summaries which I wrote for the purpose of sharing with the participants incorporated data from participant observations. One disadvantage I faced when using participant observation as a research technique was the inability to observe a situation while participating at the same time . However, the research technique enabled me to observe non-verbal expressions of participants during research activities.

5.4.6 Use of photography

According to McNiff *et al.* (2003), photography as a research technique can be used to recall events, show the quality of participant engagement in research activities and even validate the research. As mentioned earlier, I used a digital camera to record interactive activities during focus groups and workshop sessions. Photographs taken during workshops and focus groups showed the level of participant engagement in communicative interactions. Appendix 5 (see page 404) shows four pictures from the research process to provide evidence for social interactions in the NMK research group community of practice. I mainly used photographic data to enrich aspects of the research events when disseminating findings in seminars and conferences.

5.4.7 E-mail communications

As introduced in Chapter 1 (see Section 1.3), this study was undertaken at two distinct levels: the *core* and *thesis* action research projects (see also Section 6.2.3). The core action research project, in which I collaborated with fellow employees at the NMK, sought to improve organisational learning and sustainability practices in the organisation. The thesis

action research project entailed working with peers and academic supervisors, while at Macquarie University, towards the fulfilment of a critical action research doctoral study. Email communications with the participants proved to be a useful research technique for sustaining momentum and maintaining links between the two projects. The following email messages from A2, A7, A19 and A4, which I received while working at Macquarie University on the thesis action research project, confirm this claim:

> Thanks for keeping in touch; it keeps your research alive despite your absence. (A2, 05/04/06)
>
> Things in the Museum have not changed much despite the big talk about the closure. I found a lot from your project that the Museum needs to borrow. (A7, 13/08/05)
>
> Training needs assessment workshops were concluded well. …Heads of departments and curators attended the workshops. As usual the DEC members are not keen in these initiatives. Maybe your research will help them. (A19, 05/04/06).
>
> The Heritage Bill went through the Parliament's Whole House Committee where amendments were done and taken for a third reading and passed. …We are also expecting the new salary to be implemented. …I also talked with [the Director General] about staff forums, he has asked me to come up with at least a- 6 months staff communication strategy… I am positive we are gradually and steadily heading the right direction. (A4, 11/07/06)
> (E-mail communication data)

These e-mail messages indicate how social change processes and the emergence of organisational learning and sustainability at the NMK unfolded in real time. In 2005, very few social changes were visible (A7). The situation changed towards mid 2006 as evident in the e-mail message from A4 (see also Sections 8.2.3, 8.4.3 and 8.6.3).

While in Kenya, I also encouraged the participants to share their thoughts and frustrations on the Museum in Change processes through e-mails. For example, on 16/10/05 I received the following e-mail comments from A19 complaining about the uncoordinated manner in which the Nairobi Museum was closed to pave way for its revitalisation and renovation:

> The Museum is closed, but turn around and check the management procedures undertaken during such an exercise; no memo or discussions were made with the affected personnel (Extracts from e-mail sent by A19 on 16/10/05).

The e-mail comment from A19 reconfirmed how poor communication and information flows influenced the emergence of organisational learning and sustainability as reported in Chapter 8 (see Section 8.3.1). While e-mail exchanges with the participants enabled me to keep pace with the social changes at the NMK, they did not offer opportunities for multiple lines of communication, as in focus groups and workshops. Furthermore, the research technique did not provide opportunities for extensive deliberations of sustainability issues.

5.4.8 Document reviews

Documents are a readily accessible source of data in action research (Burns, 1999) and they can yield significant information for researchers (Stringer, 2007). The 2005-2009 NMK strategic plan, consultant reports, Museum in Change *Bulletins* and speeches made during the official launch of Museum in Change Programme were some of the documents reviewed in this research (see Table 5.2 for details).

Table 5.2   Documents reviewed during the study

Documents reviewed	Emerging insights from the data
1. Hunting Technical Services (1999) and Deloitte & Touche (2001) consultant reports.	Generated data on contextual factors that pre-existed at the NMK prior to the implementation of the Museum in Change Programme (see Section 7.2).
2. Speeches made during the launching of the Museum in Change Programme on 01/03/06.	Generated data on the emergence of new social relations at the NMK and reconfirmed findings from workshops and focus groups on contextual factors that enabled or constrained social change processes (see Chapter 8).
3. 2005-2009 NMK Strategic Plan (see NMK, 2005).	Provided data on the mission, vision, values and the emergence of new structures (see Section 2.3). The data reconfirmed participant visions of a sustainable NMK and interpretations of sustainability in context (see Section 7.3)
4. 2006 NMK Service Charter	Generated data on core values and principles of service delivery at the NMK in the context of heritage management and conservation in Kenya (see Sections 7.3.2 and 8.6.1).
5. Museum in Change *Bulletins*	Generated data that confirmed the *workability* or *outcome validity* (see Section 5.5.2) of findings from the research. See Section 8.2.3 for an example on communication.
6. Report of the NMK personnel streamlining committee (see NMK, 2003).	Generated useful insights into the contextual factors that influenced staff motivation and development. Data from the document supported findings from FG11 and W2 on issue of staff motivation and development (see Section 8.4).

As illustrated in Table 5.2 data from document reviews complemented and reconfirmed findings from focus and workshops. For example, data from the NMK strategic plan document (see NMK, 2005) on the strengths, weaknesses, opportunities and threats of the organisation support findings on the contextual issues related to organisational learning and sustainability as presented in Chapters 7 and 8.

5.4.9 Informal interactions with colleagues

Throughout the three cycles of data generation, described in Chapter 6, I regularly reported at the NMK in my capacity as the action researcher and also an employee of the organisation. This constituted part of the core action research project as introduced in Chapter 1 (see Section 1.3) and clarified further in Chapter 6 (see Section 6.2.3). I made informal interactions with some of the research team and other fellow employees. I documented insights from these interactions in my research journal as confirmed by these two entries:

> Today I had a brief meeting with the new human resource person. [C7] shared concerns regarding communication problems at the NMK. For C7, informal communication dominates formal communication at the organisation. (Journal, 17/10/05)
>
> I spent the day interacting with some colleagues at the NMK, I learned that major decisions are now being made by the Directors Executive Committee (DEC) organ. Unfortunately, some of the decisions are not based on broad consultations with heads of departments. This has started causing resistance within some levels of the staff. (Journal, 19/10/05)

I need to reiterate that focus groups and workshops were central in accessing the social reality of enabling organisational learning and sustainability at the NMK. As *collectivistic* research techniques, they created multiple lines of communication and offered participants a safe environment for sharing their organisational experiences. Data from the other research techniques discussed here have been used to enrich and reconfirm those from focus groups and workshops (see Chapters 7 and 8). In what follows I examine how this research addresses quality and validity in regard to the data generated using the research techniques described in the previous sections.

5.5   Quality and validity in critical action research

Quality, validity, trustworthiness, credibility and workability have all been suggested as terms to describe criteria for good action research (Greenwood & Levin, 2007; Herr & Anderson, 2005; Stringer, 2007). Unlike traditional research, where rigour is based on established routines for ensuring quality and validity, I have found no specific criteria for critical action research in the literature. Action researchers are still faced with the challenge of responding to issues related to the rigour and validity of their investigations (Burns, 1999). But like all researchers, I am interested in whether insights that I generated on organisational learning and sustainability are valid or trustworthy. Positivists tend to prefer the term *validity* (Campbell & Stanley, 1963) and naturalistic researchers favour *trustworthiness* (Lincoln & Guba, 1985) as criteria for judging *good* research. Although neither term is adequate for critical action research, I use the criteria of validity and trustworthiness to describe how I ensured the quality and credibility of this research. The inadequacy of relying on validity and trustworthiness as criteria for judging critical research arises from the fact that neither term acknowledges its action-oriented outcomes (Herr & Anderson, 2005). Herr and Anderson (*ibid*.) choose to use *validity* with qualifying adjectives that I find relevant for this study (see Section 5.5.2). This research also places *reflexivity*, which forms part of the methodological and epistemological basis of critical action research, at the centre of addressing issues related to quality and rigour.

Addressing issues related to quality in critical action research requires explaining how data are generated, gathered, explored and evaluated (Coghlan & Brannick, 2005). It also entails how research events are questioned and interpreted through multiple action research cycles. I am aware that critical action research inquiry is complex and difficult to conduct, if it is to be of high quality, systematic and valid (Zuber-Skerritt, 2001). This explains why I decided to use *reflexivity* and criteria associated with *validity* and *trustworthiness* to enhance the quality of this study. This decision is in agreement with Connelly and Clandinin's (1990, p. 7) claim that "each inquirer must search for and defend the criteria that best apply to his or her work". Nonetheless, these criteria are tentative and in flux, as establishing quality criteria for critical action research is an ongoing conversation (Herr & Anderson, 2005).

The next section discusses how the reflexive stance adopted in this research enhanced the quality of findings presented in subsequent chapters. This discussion is based on the assumption that the participants and I were unavoidably constitutive of the data we generated on organisational learning and sustainability.

5.5.1 Enhancing quality through reflexivity

There is a considerable body of literature on the importance of reflexivity in qualitative research (e.g. Alvesson & Sklödberg, 2000; Bourdieu, 2004; Bourdieu & Wacquant, 1992; Grace, 1998; Johnson & Duberley, 2000, 2003; Koch & Harrington, 1998; Northway, 2000; Woolgar, 1988). Different conceptions of reflexivity that range from self-reference to self-awareness to the constitutive epistemological and ontological commitments of the researcher have been described in the literature. Johnson and Duberley (2000) classify reflexivity into two types: epistemic and methodological. Epistemic reflexivity focuses on the researcher's belief system and involves questioning and challenging ontological and epistemological assumptions. Methodological reflexivity focuses on the impact of the researcher on the research methods and protocols in a given setting. It is identified with a positivist approach to research that aims to generate generalised knowledge. This study embraces epistemic reflexivity to advance a reflexive research practice as a strategy of ensuring quality and credibility in critical action research. Reflexivity is integral to this study as it forms part of the methodological principles and epistemological foundations of critical action research discussed earlier (see Section 5.3; see also Hall, 1996).

According to Bourdieu (2004; see also Schirato & Webb, 2003), reflexivity involves an interrogation of limitations to research that arises from one's social position, intellectual bias and the structural and cultural factors that pre-exist in a research context. This is because reflexivity is not a neutral process, it is in itself structurally and culturally conditioned (Coghlan & Brannick, 2005). For this research, reflexivity involves interrogating how the NMK structural and cultural context, my position, the positions of the participants and my knowledge-base influenced social learning outcomes. I have understood *reflexivity* as a collective process that was not my sole preserve as the critical action researcher. This is because reflexivity is best understood as a collective, rather than an individual process (Schirato & Webb, 2003). This also guards against reflexivity

becoming narcissistic, as critiqued by Bourdieu (2004), who favours a reflexivity that is field-oriented and historically situated (see Chapter 2).

The quality of this study was enhanced as a result of the reflexive stance I adopted with respect to research design, data generation, data analysis and interpretation of research findings (see Chapter 6). This claim is supported by Burns's (2005) argument that the cyclical or iterative nature of action research is one of its strengths, in terms of enhancing quality and rigour in a study. The three broad cycles of inquiry reported in the next Chapter (see Sections 6.3, 6.4 and 6.5) enabled me to triangulate data from different research events and research participants through multiple data sources (see also Section 5.5.3). Each broad cycle comprises iterative processes of planning, data generation and reflecting on social learning outcomes. New insights on organisational learning and sustainability were therefore reconfirmed against previous iterations of the cycle. The third cycle was implemented by building on empirical evidence that emerged from previous cycles. This expanded the scope of enabling social change processes and the emergence of organisational learning and sustainability at the NMK (see Section 8.7).

Achieving reflexivity as described here was not an easy task. Exploring the way the NMK context and my academic involvement affected this study posed challenges as verified by the following journal reflection:

> I need academic advice on how to explore the complex relationships between processes of knowledge generation, organisational contexts of such processes and my actual involvement; and how to make reflexivity a central aspect of my study beyond the usual action research mechanical cycles.
> (Journal, 06/07/05)

When I made the above reflection, I was still struggling with finding suitable philosophical and theoretical frameworks within which to address the ontological and epistemological questions posed in Chapter 1 (see Section 1.4). Coghlan and Brannick (2005) argue that different epistemological and ontological approaches encourage different types of reflexivity. Making epistemic reflexivity an integral aspect of this research has made it possible to go beyond the action research mechanical cycles as aspired in the above journal entry. Similarly, reflexivity that is field, history and context oriented helps to strengthen

the ontological foundations of reflexivity (Bourdieu, 2004). This has helped to ensure rigour in relation to the critical realist ontological framework of the study. In the next section I focus on how I drew upon various validity criteria to enhance the quality of the study.

5.5.2 Ensuring validity in action research

As mentioned earlier, Herr and Anderson (2005; see also Anderson *et al.*, 1994) choose to use the term *validity* with qualifying adjectives, instead of coining a new term for indicators of quality in action research. These authors offer five criteria for validity that I find applicable to this critical action research inquiry. They are *democratic validity, process validity, outcome validity, catalytic validity* and *dialogic validity*. Bradbury and Reason (2001) suggest five interrelated issues on quality in action research. They argue that quality and validity in action research can be achieved by addressing questions related to *relational practice*, *reflexive-practical outcome*, *plurality of knowing*, *significance* and *emergence and enduring consequence*. All these issues were central to this research which views enabling social change and development in organisational contexts as emergent educational processes of engaging with self, persons and communities of practice for a considerable period of time (see Section 4.2.2). Bradbury and Reason's (2001) discussion of quality and validity overlaps to some extent with Herr and Anderson's criteria which are explained in below by linking them to the aims and outcomes of the study.

- *Democratic validity*

  This criterion requires that the multiple perspectives on organisational learning and sustainability of all the participants are accurately represented. It overlaps with Bradbury and Reason's (2001) focus on *relational practice* that requires involving the perspectives of all participants in a study. This study was collaboratively undertaken with a group of fellow employees whose voices are incorporated in the findings as reported Chapters 6, 7 and 8.

- *Process validity*

  This criterion requires that a study is conducted in a dependable and competent manner (Mills, 2007). I addressed this issue by being vigilant in reflecting on the

suitability of the research techniques with a view to improving strategies of data generation. For example, during focus groups and workshop sessions I asked the participants to provide written reflections on the level of our interactions and how they could be improved (FG8, FG12 and FG14; see also Section 6.5.2). A suggestion made by A14 during FG8 enabled me to improve participant contributions and interactions in subsequent research sessions (see Section 5.4.1 for details). Ensuring that all participants contributed during focus groups and workshop sessions enabled me to have multiple perspectives on processes of social change and the emergence of sustainability. This has contributed to the dependability and competency of this research (see also Section 5.5.3 on triangulation). The detailed research process that I present in Chapter 6 confirms that I conducted the research in a dependable and competent manner. It has resulted in action-oriented outcomes on social learning within a community of practice (see Sections 6.3.4, 6.4.3, 6.5.3 and 8.2).

- *Outcome validity*

   This criterion relates to the extent to which communicative interactions achieved action-oriented outcomes on social change processes and the emergence of organisational learning and sustainability (see Section 8.2.3). It is dependent on process validity in that, if the research process is superficial or flawed, the outcome will reflect it (Herr & Anderson, 2005). Greenwood and Levin (2007) call this criterion *workability* and link it to Deweyan pragmatism explained in Section 5.3.2. They argue that workability is the central aim of any action research project. This research was guided by a reflexive concern for practical social learning outcomes as highlighted in Chapters 6, 7 and 8 (e.g., see Sections 6.3.4, 6.4.3, 6.5.3, 7.5 and 8.2.3). It was characterised by constant and iterative cycles of action and reflection as part of the process of improving organisational learning and sustainability at the organisation (see Sections 6.3, 6.4, 6.5 and 8.7). Findings reported in Chapters 7 and 8 confirm the *workability* or *outcome validity* of this critical action research in the context of enabling organisational learning and sustainability.

- *Catalytic validity*

   According to Lather (1986, p. 272), catalytic validity is "the degree to which the research process reorients, focuses, and energizes participants toward knowing reality

in order to transform it". Catalytic validity overlaps with process and democratic validity to highlight the transformative potential of action research (Herr & Anderson, 2005). Through communicative interactions this research energised and reoriented the participants towards enabling social change processes and the organisational learning and sustainability at the NMK (see Chapters 7 and 8). This claim can be corroborated by the following written reflections of participants made during FG13:

> For the change to take place there is need to let the staff know what the NMK is changing or transforming into with a clear vision. (A5)
>
> My view about cultural change at the NMK is that I have to address the importance of the change within the NMK and its benefits to the staff. (A21)
>
> Leadership should be felt in initiating and managing change. (A1)
>
> I have the passion to see the NMK change initiative come to fulfilment. I am ready to change and will assist the NMK to change the culture. (A19) (Reflections from FG13, 18/10/06)

Chapters 6, 7 and 8 report social learning and sustainability outcomes that further provide examples of catalytic validity (see Sections 6.3.4, 6.4.3, 6.5.3, 7.5 and 8.4).

- *Dialogic validity*

  This criterion involves having a critical conversation with others about one's research findings and practices (Mills, 2007). Dialogic validity requires that the "goodness" of the research is established by application of peer review processes similar to those used in academic journals (Herr & Anderson, 2005, p. 57). During the course of this research, I subjected the research design decisions, process and findings to the scrutiny of peers, researchers and practitioners in the fields of environmental education and environmental studies. I presented papers at three international conferences that were peer reviewed before being included in the proceedings (see Atiti, 2006, 2007a, 2007b). This has contributed to the *goodness* of this study.

The next section examines how I further enhanced the quality of this study by drawing upon Lincoln and Guba's (1985) validity criteria for qualitative research.

5.5.3 Enhancing trustworthiness in action research

Quality in action research is also based on checks to ensure that the research outcomes are trustworthy (Stringer, 2007). By *trustworthy*, I mean that they do not merely reflect my perspectives, biases or assumptions (see also Section 5.5.1). Lincoln and Guba (1985) suggest that trustworthiness in qualitative research can be established through a number of procedures that include *credibility, transferability, dependability* and *confirmability*. Here, I will only confine myself to how I enhanced the trustworthiness of this research through the procedure of credibility, that is, how I ensured the plausibility and integrity of the study. Greenwood and Levin (2007, p. 67) define credibility as "the arguments and the processes necessary for having someone trust research results". The following credibility processes contribute to the trustworthiness of the research findings presented in subsequent chapters:

- *Prolonged period of data generation*

  I had a prolonged engagement with the research participants at the NMK that lasted for more than a year. During this time, I consciously observed events, research activities and the NMK context. I recorded some of the events and research activities on a digital camera (see Section 5.4.7). The prolonged period for focus groups and workshops provided participants with more opportunities through which they shared their organisational learning and sustainability experiences (see Section 5.4.1).

- *Triangulation*

  This process involves corroborating evidence from different sources to illuminate a theme or perspective (Creswell, 2007). According to Stringer (2007), the credibility of a study is enhanced when multiple sources of data are incorporated. This research applies triangulation in the context of understanding the research questions from a multiplicity of perspectives (Elliott, 1993). Use of multiple and different sources of data, research techniques, research participants and theoretical perspectives has provided corroborating evidence of social learning outcomes as presented in the subsequent chapters.

- *Member checking*

  I provided members of the research group with opportunities to review raw data, analyses and reports. I engaged in regular feedback sessions during focus groups with

the research participants on both data generated as explained later in Chapter 6 (see Sections 6.6). I provided feedback to the NMK through reports after each of the broad cycles described in Chapter 6. Workshop reports on W1, W2, W3 and W4 were shared with the participants and top NMK management. Presentation of the data in Chapters 7 and 8 involves a vigorous and ongoing search for disconfirming evidence as recommended by Dick (2001). This has enabled me to verify that the research adequately represents participant views and perspectives on processes of social change and the emergence of sustainability and organisational learning at the NMK.

- *Use of thick descriptions*
  According to Patton (2002, p. 437), "thick, rich description provides the foundation for qualitative analysis and reporting" (see Section 6.6.1). Denzin (1989) emphasises the importance of using *thick description* in writing research. To enhance trustworthiness of the research I have presented voices, feelings, actions and meanings of the participants so that they can be heard (see also Section 6.6.2). I have used direct quotes and verbatim extracts from focus groups and workshops transcripts. These are presented with single inverted commas throughout this study. Furthermore, I have described in detail the context of the study (see Chapter 2; see also Appendix 1, p. 396 for details of participants). This I hope will enable the reader to determine whether some of the findings may be applicable to their own contexts (Creswell, 2007).

5.6   Summary

This chapter has advanced a critical action research methodology for exploring organisational learning and sustainability in communities of practice. I have made explicit the philosophical framework within which I designed and implemented a critical social research in environmental education at the NMK. Critical action research methodology, as applied here, incorporates philosophical assumptions from critical theory and action research. The chapter discussed basic assumptions underlying critical theory and explained what being *critical* entails for this research. I have highlighted how power is embedded and reinforced in agential, structural and cultural relationships in an organisation. Power is viewed more broadly to include both oppressive and productive influences in an

organisation. The chapter has pointed out critiques of critical theory and how I have addressed them in the study. For example, I have drawn upon *Archerian social realism* to provide a deeper understanding of power as a quality growing from within oneself and not something that is limited by others.

The chapter has presented action research as both a method of critical inquiry and epistemology of change. I have articulated key features and methodological principles that have informed this critical social research. Deweyan pragmatism provides the epistemological foundations of critical action research as employed in this study. I have pointed out critiques of critical action research that include its lack of standards for judging quality and rigour. Various research techniques for accessing the social reality of organisational learning and sustainability were examined. They include focus groups, workshops, document reviews and e-mail communication, among others. The chapter examined how the research addresses issues of quality and validity in regard to the data presented in subsequent chapters.

Chapter 6 presents the research design and processes in which data on organisational learning and sustainability were generated within three broad cycles of inquiry.

Chapter 6 Research Design and Processes

6.1   Introduction

This chapter reports on how I designed and implemented the study using critical action research methodology, as discussed in the previous chapter. Research design is the logical sequence that connects the empirical evidence to the aims and findings of a study (Yin, 2006). I present the sequence within three broad cycles of inquiry that occurred at the NMK between March 2005 and March 2007. These cycles correspond to the three phases of morphogenesis examined in Chapter 3 (see Section 3.3.1). They reflect the methodological principles of critical action research presented in Chapter 5 (see Section 5.3.1). Each broad cycle comprises iterative processes of planning, taking collective action and reflecting on social learning outcomes.

The first cycle outlines how I engaged the research participants in identifying contextual issues related to organisational learning and sustainability. The second cycle reports on how some of the identified issues were collectively acted upon to enable social change and development. The third cycle explores ways of institutionalising social change processes and the emergence of organisational learning and sustainability at the NMK. Central to these cycles of inquiry is the exploration of *morphogenetic relationships* in a community of practice through *communicative interactions*, to deepen context specific understanding of organisational learning and sustainability. Towards the end of the chapter, I report on how I have analysed and managed data in the study and articulate ethical implications of exploring organisational learning and sustainability at the NMK. Throughout this chapter, I link the processes and the research design with theoretical frameworks (see Chapters 3 and 4), research aims (see Section 1.3), the research method and techniques (see Chapter 5), the findings (see Chapters 7 and 8) and the discussions and conclusions (see Chapters 9 and 10).

6.2   An action research design and process of inquiry

According to Creswell (2003), the design of a study begins with the selection of an area of focus and a philosophical framework to guide the research process. As mentioned in Chapter 5 (see Section 5.2), I was influenced to design this study within a critical action research perspective based on my previous experience of working with teachers on developing interpretation resources and materials to foster environmental learning in Kenya (see Atiti, 2003b, 2004; see also Section 1.3). The other influence was from my academic supervisor, Daniella Tilbury, who favours this methodology for its contribution to change processes. This part of the chapter examines the processes and challenges of designing a critical action research exploration into organisational learning and sustainability at the NMK.

6.2.1 Early research design decisions

Initially, my previous Masters research had motivated me to investigate non-formal environmental education practice and possibilities in four Kenyan organisations that included the NMK. On 4 October, 2004, I shared this research interest with Heila Lotz-Sisitka[42] who had supervised my Masters degree from Rhodes University. The following remarks from her through an e-mail prompted me to reconsider investigating non-formal environmental education practice and possibilities in Kenya in a similar manner to what I had done in my Masters degree:

> Don't be chicken! Why do a PhD if it is another Masters degree? You have such excellent capabilities to chart new territory.
> (H. Lotz-Sisitka, personal communication, 7 October 2004)

In consultation with my academic supervisor Daniella Tilbury, I decided to chart new territory by investigating organisational learning and sustainability. This change was however, subject to approval from the NMK management. The following e-mail response from the NMK Director General allowing me to investigate organisational changes within

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[42] In August 2007, I nominated Heila Lotz-Sisitka as an adjunct supervisor. Prior to this nomination, she had acted as a critical friend and her invaluable comments enabled me to overcome a theoretical impasse I had experienced in writing Chapters 4 and 5.

the Museum in Change Programme encouraged me to chart a new territory (see Section 1.3.1):

> What a wonderful idea. Your choice of research project is in harmony with our aspirations for organisational change. I will be very supportive of such a project and will ensure that you have access to whatever documentation that you may require.
> (I. Farah, personal communication, 26 October 2004)

Consequently, I began the process of developing a project proposal on organisational learning and sustainability as an area of focus. This focus required me to draw upon literature from the fields of environmental education and organisational studies. I defined the broad goal for the study to deepen our understanding of ontological, epistemological and pedagogical implications of exploring organisational learning and sustainability using critical action research methodology (see Sections 1.3 and 10. 3). I then generated possible aims towards the realisation of this broad goal as stated in Section 1.3. One major challenge that I faced during the design process was on how to ensure theoretical congruence within the research proposal. The following journal reflection attests to this struggle

> The section of 'change towards sustainability' needs an overhaul. As it is now, it does not provide a good theoretical framework for the study. It should be reworked to address current global initiatives in change towards sustainability; problem this study is addressing for organisational change; introduce perspectives on critical theory and systems theory; and introduce the idea on institutionalising change for sustainability.
> (Journal, 13/02/05)

To refine theoretical frameworks for this study, I engaged myself in a continuous and time-consuming process of "progressive focusing" as described by Arksey and Knight (1999, p. 41). This enabled me to identify the value and significance of exploring organisational learning and sustainability in my own organisation. The following journal reflection confirms this claim

> It is now becoming clearer on what my study will involve in terms of the research process: formation of team and application for research ethics approval; a critical engagement with the context to identify shaping forces, explore power relationships and surface underlying assumptions; and envisioning sustainability and implementing collective actions. No doubt this is a very complex study.

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After five months of progressive focusing, I generated a research proposal and budget that guided the exploration of organisational learning and sustainability at the NMK. I formally submitted my research proposal to the Graduate School of the Environment (GSE) for approval. Data generation commenced on 25 March 2005 after subjecting the research design to the scrutiny of peers at an international seminar on environmental education.

6.2.2 Subjecting research design to the scrutiny of peers

On 16 March 2005 I subjected the research focus, ideas and design decisions to the scrutiny of peers, researchers and practitioners in environmental education during the 8th International Invitation Seminar[43] at Rhodes University, South Africa. This aimed at ensuring quality as in *dialogic validity* (see Section 5.5.2). The seminar was followed by a PhD week at the same venue in which issues on research quality, evidence and analysis were discussed. Attendance of the two events enabled me to gain useful insights into issues of validity and rigour in qualitative research. Emerging insights and comments from critical friends led to further refinement of the research design.

At this point, I need to highlight two major criticisms that my action research design drew from critical friends and peers. The first criticism is associated with the limitation of focusing on one case study. The following comments by Cardew (personal communication, 8 March 2005) sum up this limitation: 'But it … [is] one case study, with all the limitations of a sample of one. And if it is unevenly executed it could end up being a case of lost potential'. In response to this criticism I would argue that this study provides an example of an *insider action research* design that sought to investigate the whole rather than parts of the NMK (Coghlan & Brannick, 2005; see also Section 10.2.3). As a case study, it sought to engage and report on the complex reality of addressing sustainability issues within a specific context (see Yin, 2006). It was designed as *educative* with more emphasis on developing the learning capabilities of participants to enable organisational learning and

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[43] The 8th International Invitation Seminar on *Ethics and Situated Culture* brought together leading environmental and health educators from all over the world. It focused on four deliberation themes of relational epistemologies, local curriculum, situated learning and participation, democracy and globalisation. I found these themes relevant to my study at the NMK.

sustainability at the NMK and with less emphasis on producing findings that could be generalised to other contexts (see Section 10.3.3).

The second criticism that my research proposal attracted was its employment of oppositional reasoning as captured here:

> One major limitation with the growing body of literature on environmental education is its emphasis on individual learning and personal change at the expense of organisational learning and wider societal change for sustainability.
> (Extract from research proposal).

Lotz-Sisitka (personal communication, 24 March 2005) criticised me for setting up an opposition in the above argument to create a space for my research. She argued that shallow forms of oppositional reasoning are the weakest form of reason. In addition, fixed oppositions conceal the extent to which things presented as oppositional are in fact interdependent and relational. Contrary to my reasoning in the above quote, I have found that organisational learning is interdependent and relational to individual learning and personal change, as highlighted in Chapters 3 and 4 (e.g. Sections 3.2.3 and 4.4). For Derrida (1976), oppositional reasoning or thinking not only implies difference but hierarchy where one group is usually superior and the other inferior. The superior group derives its privilege from the suppression of the opposite. I have addressed this criticism by drawing upon a social learning theory that focuses on the significance of morphogenetic relationships and communicative interactions as discussed in Chapter 4 (see Section 4.2). In the next section I discuss the implications of exploring organisational learning and sustainability in my own organisation.

6.2.3 Doing action research in and on my own organisation

According to Coghlan and Brannick (2005), undertaking action research *in* and *on* your own organisation is an opportunistic and complex process. It was complex for me because it necessitated exploring sustainability issues as emergent and relational properties of the social and socio-cultural interactions at the NMK (see Sections 6.4.2 and 7.4). It was opportunistic given that I selected to explore organisational change initiatives that were already taking place at the NMK (see Sections 1.3.3 and 7.2.2). As a researcher in my own

organisation, I had *pre-understanding*[44] of the NMK as a social system (Coghlan & Brannick, 2005). My position as a senior curator, with many years of lived experience at the organisation, provided me with an added advantage when designing and doing this research (see also Section 1.2). However, *pre-understanding* posed challenges when it came to reviewing and critiquing assumptions (see Section 10.2.3). This is because I was part of the system that I was trying to investigate (see Section 5.2.1). To overcome this challenge, I used journaling (see Section 5.4.4) as a mechanism for reflecting on and gaining insights into my pre-understanding. Making reflexivity an integral part of the study, as pointed out in Chapter 5 (see Section 5.5.1), further enabled to meet this challenge (see also Sections 6.6.2 and 6.7.3).

The design of this study acknowledged a broad commitment from the NMK as a system and from me as the action researcher towards organisational learning and sustainability. It followed three distinct stages. Stage one sought to establish support from the NMK top management to set up the research group, and to identify contextual factors that enabled or constrained organisational learning and sustainability (see Sections 6.3; Chapter 7). Stage two was designed to engage the research group to enable organisational learning and sustainability during communicative interactions (see Section 6.4; Chapter 8). I designed stage three to explore ways of institutionalising change and sustainability at the NMK (see Section 6.5; Chapter 8).

As mentioned in Chapter 1 (see Section 1.3), the NMK was undergoing a system-wide change that was referred to as the *Museum in Change Programme*. My researcher's role entailed being part of the system-wide change in regard to enabling organisational learning and sustainability. However, the Museum in Change Programme was independent of my critical action research project on organisation learning and sustainability at the NMK. Following Perry and Zuber-Skerritt (1992; see also Zuber-Skerritt & Perry, 2002) I make a distinction between the two projects by calling the collaborative inquiry into the Museum in Change Programme the *core* action research project, and the independent critical study the *thesis* action research project. Making this distinction is important because my

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[44] According to Gummeson (2005) pre-understanding refers to a researcher's knowledge, insights and experience prior to a study project. Such knowledge, insights and experience were based on both my theoretical understanding of the NMK dynamics, and my lived experience of the organisation over 10 years.

responsibilities as a "complete member[45]" of the NMK and critical action researcher differed (Coghlan & Brannick, 2005, p. 47). As a *complete member* of the NMK, I was a participant who sought to contribute towards the Museum in Change Programme in the context of improving organisational learning and sustainability practices. This is corroborated by the following extract from a letter thanking the NMK Director General for attending Workshop 2:

> I sincerely thank you for finding some time out of your busy schedule to share with us your vision of Museum in Change and the challenges you are facing in enacting holistic changes at NMK. Your presentation during the March 8 Museum in Change research workshop provided useful insights into organisational learning and change for sustainability and further enabled team learning through *dialogue* that prevailed during the sessions.
> (Appreciation letter, 10 March, 2006)

This letter confirms that I was inquiring into the Museum in Change Programme to generate context specific insights into organisational learning and sustainability (see Section 7.4). The *core* action research project of the study was thus designed to engage the research participants in identifying and acting on contextual issues that constrained social change and the emergence of sustainability. I sought to encourage the participants to share their organisational learning experiences within the context of the Museum in Change Programme with a view to developing their reflexivity to address sustainability issues. As I engaged the participants in the *core* action research project of inquiring into the Museum in Change Programme, I at the same time inquired into how emerging social learning processes strengthened the capabilities of participants to address sustainability issues (see Section 7.5). In other words, I engaged in a sort of a "meta cycle inquiry" that entailed reflecting on contextual issues that we identified, reflecting on our communicative interactions and reflecting on assumptions and values underlying the NMK (Coghlan & Brannick, 2005, p. 25). The *meta-cycle inquiry* forms the focus of this thesis and it was designed to deepen understanding of the ontological, epistemological and pedagogical implications of exploring organisational learning and sustainability in a community of

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[45] Coghlan and Brannick (2005) use the term *complete member* after Adler and Adler (1987) to refer to being a full employee of your organisation and keen to retain one's position after the research is completed. I was in the position of being keen to retain my job with the NMK after this study.

practice (see Sections 1.3 and 10.3). Figure 6.1 shows the relationship between the *core* and *thesis* action research projects.

Figure 6.1   Core and thesis action research projects of the inquiry

Critical action research inquiry at the NMK

Investigating Museum in Change processes to generate context specific and critical understanding of organisational learning and sustainability
(*Thesis* action research project)

Act

THIRD CYCLE

Reflecting on & delineating social change processes

Reflect

Plan

Plan

FIRST CYCLE

Identifying contextual issues

Act

Core action research project

Reflect

SECOND CYCLE
Deliberating & acting on contextual issues

Reflect

Act

Plan

Social Learning Outcomes
- Deeper understanding of agential, structural and cultural dynamics of the NMK
- Enhanced learning capabilities and reflexivity of participants to address sustainability issues
- Improved organisational learning and sustainability practices

Figure 6.1 illustrates how the *core* action research project was integrally intertwined with the *thesis* action research project. The large circle represents the *core* action research project of collaboratively investigating organisational learning and sustainability practices with a group of fellow employees as a community of practice. The three small circles, which form part of the large circle, represent the *thesis* action research project of generating context specific and critical understanding of organisational learning and sustainability. The thesis project and the research aims (see Section 1.4) are echoed in Mezirow's (1991) three forms of reflection of *content*, *process* and *premise* explained in Chapter 4 (see Section 4.4.3). I have analysed the *content* of the contextual issues that the participants identified (see Section 7.2) to reveal the complexity of structural and cultural conditioning at the NMK (see Sections 9.2.1). I have critically reflected on the *process* of addressing contextual issues (communicative interactions) to identify ways of knowing the social reality of organisational learning and sustainability (see Sections 9.4). Consistent with *premise* reflection, I have critically reviewed assumptions and values underlying the NMK and explored alternatives from critical theory perspectives (see Sections 7.4 and 9.3).

Research activities in all the circles in Figure 6.1 followed cyclical processes of planning, action and reflection. Key social learning outcomes from the study are indicated. I have described both cycles in a manner that highlights the validity and rigour of this study as earlier reported in Chapter 5 (see Section 5.5). The three broad cycles of inquiry, as described in the next sections constitute both the core and thesis action research projects of exploring morphogenetic relationships through communicative interactions in a community of practice. Having examined the process of designing this study the next section describes the first broad cycle of inquiry that involved gaining secondary access, recruiting research participants and identifying contextual issues at the NMK.

6.3   First cycle of inquiry: identifying contextual issues

Like the morphogenetic cycles described in Chapter 3 (see Section 3.3.1; see also Section 9.2), the broad critical action research cycles presented here unfolded in real time. The first broad cycle of inquiry took place between 25 March 2005 and 5 May 2005. It lasted for six weeks with a realisation of three main research events, a start-up workshop (W1) and two

focus group meetings (FG1 and FG2). This part of the chapter reports on the cycle within iterative processes of planning, data generation and reflecting on emerging social learning outcomes. I describe how I gained the support of the top NMK management and formed a research group that was cultivated to operate as a community of practice. All through the broad cycle of inquiry, I undertook numerous action research cycles to explore ways of knowing the social reality of organisational learning and sustainability as part of the thesis action research cycle.

6.3.1 Initial planning and gaining access

Creswell (2007) notes that gaining access to organisations and individuals as well as working within an institutional ethics review committee can pose challenges to a study. Initial planning for the first cycle of inquiry started with seeking secondary[46] access to the NMK and obtaining ethics approval from the Macquarie University Human Ethics Committee. Gaining secondary access entailed access to restricted documentation and data on Museum in Change Programme, access to employees for the research and use of organisational facilities and resources for research meetings. On 28 January 2005 I received a formal letter from the NMK management. I used the letter to support my request for ethics approval that was granted on 07 March 2005. My initial planning also involved formally applying for financial support from the Graduate School of the Environment (GSE) Higher Degree Research fund.

Other than seeking secondary access, I also sought the support of the top NMK management. The NMK top management comprises the Director General, all Directors, the Financial Controller and the Legal Officer. This team make up the Directors Executive Committee (DEC) which has the mandate to make key organisational decisions in consultation with a Board of Directors. On 06 April 2005, I held a brief informal meeting with the NMK Director General to explain the nature and significance of the study to the organisation. This was followed with other informal meetings with the Director of Administration and the Director of Research and Scientific Affairs. I used these meetings to

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[46] As an employee of the NMK, I had primary access to the organisation. This means that I had the ability to get into the organisation and be allowed to undertake research. However, this did not mean that I had secondary access that would allow me to draw upon specific privileged information that may not be available otherwise.

judge their reaction and support for my research focus on exploring organisational learning and sustainability at the NMK. I was aware that the research involved political dimensions since I sought to challenge assumptions, values and power relations in the organisation. My informal meetings confirmed overwhelming support from the NMK DEC members for the research initiative. The Director General was very keen on the potential research contribution to the Museum in Change Programme.

This study required working with a research group that was akin to a community of practice, as described in Chapter 4 (see Section 4.2.2). The next section reports on the process that I undertook in establishing the research group that I cultivated as a community of practice throughout this study.

6.3.2 Forming a research group as a community of practice

The process of forming a research group to inquire into the Museum in Change Programme began on 07 April 2005. For a period of two weeks, I held one-on-one informal meetings with colleagues in which I shared my research focus and explained what participating in the study entailed. Recruitment was through a democratic process that emphasised voluntary participation and guaranteed participants the right to withdraw from the research at any time. During the process, I aimed to ensure informed consent and to minimise any pressure on my colleagues. I issued information and consent forms (see Appendix 6, p. 406 for a copy) to those who were keen to participate and gave them time to make a final decision. I spoke to 34 colleagues with 20 agreeing to participate in the research by signing information and consent forms.

Later into the study, I recruited three other colleagues based on the recommendation of the research group that I incorporate colleagues from the NMK human resource department. This brought the total number of members of the research group to 23, as shown in Appendix 1 on page 396. Appendix 1 indicates the department affiliations and professional interests of each research group member. The number of meetings attended by each member during the entire study is also indicated. The 23 members are listed according to the date of their recruitment. For example, A1 was the first to be recruited on 11 April 2005, while A23 was recruited as late as 28 November 2006. As a group we nominated A4

as the group leader and my contact person during the periods when I was not in Kenya[47].
As mentioned earlier, I have used pseudonyms to conceal the identity of members in line
with the ethical requirements for this study (see also Section 6.7).

Due to the centrality of power relations in enabling change or stability (see Section 3.3.3) I
sought to recruit some participants from heads of departments and members of the
environmental committee. This was to ensure a sufficiently powerful research group that
would act as a catalyst for the incorporation of new ideas, practices and values into the
NMK social system (see Chapter 8). The research group comprised one acting Director
(A10), eight heads of departments (A4, A6, A7, A8, A13, A15, A17 and A19) and two
Environmental and Safety Committee members (A6 and A7). At the time of recruitment,
A10 was the acting Director of Regional Museums, Sites and Monuments (RMSM). In
reality, A10 was my immediate line manager since my position as senior curator of Kitale
Museum fell within the RMSM Directorate. Gender was not a key factor in the recruitment
process but I made attempts to have as many females (A2, A3, A14, A15, A16, A18, A20,
A22 and A23) as possible in the research group. One constraint was the limited number of
female heads of departments at the NMK. I need to note that the situation at the NMK in
terms of positions stated in Appendix 1 has changed since implementing the first cycle of
this study. As an outcome of the Museum in Change Programme the NMK management
structure has been reorganised and the initial 17 departments have been reduced to sections
within five Directorates (see Section 2.3.1 for details).

I had planned to recruit a small group of 10 participants but I chose to over-recruit based on
unfounded fears of a possible level of withdrawals. Having been transferred from Nairobi
to Kitale regional museum in May 2004, I was initially apprehensive about how my
colleagues at NMK headquarters would respond to invitations to participate in the study. It
turned out that those I recruited had a passion for contributing ideas towards organisational
learning and sustainability (see Chapters 7 and 8). This passion was manifested in the
regular attendance and active participation of most members in the research events (see
Appendix 1). Only A3, A11, A13 and A20 withdrew for various reasons. A13 left the

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[47] The 14-month period of data generation at the NMK was spread throughout my candidature at Macquarie
University. Stage one of the study was followed by four months stay at Macquarie. I therefore needed
someone to keep up the momentum of actions towards change and sustainability.

research group for unspecified reasons after attending only the start-up workshop (W1) on 21 April 2005. A11 left due to an academic engagement while both A3 and A20 left the NMK for other jobs in other organisations.

The formation of the research group and its involvement in the study followed the stages of establishing and developing communities of practice, as sites of learning, as outlined in Chapter 4 (see Section 4.2.2; see also Altrichter, 2005). After recruiting members to the research group as a community of practice I made certain resources, such as meeting places, were provided through the support of the NMK top management. I used various research techniques (see Section 5.4) to document and share organisational learning and sustainability outcomes within a community of practice (see Section 6.3.4). The community of practice was defined by background knowledge or a common stock of ideas (lifeworld) that gave us an identity (see Sections 4.2.2 and 8.6). We were also defined by our participation in the Museum in Change Programme as NMK employees. Our mutual engagement in heritage conservation activities at the NMK further bound us together as a community of practice. We operated alongside other communities of practice that were also involved in the Museum in Change Programme.

As introduced in Chapter 1 (see Section 1.5.4), this research utilises Lave and Wenger's (1991) community of practice approach as a unit of analysis for exploring morphogenetic relationships through communicative interactions to enable organisational learning and sustainability. The next section examines how the research group, as a community of practice identified contextual issues related to organisational learning and sustainability in three focus groups and one workshop.

6.3.3 Data generation: critical organisational analysis of the NMK

Following the morphogenetic approach that I adopted in this study (see Section 3.3), the first cycle of inquiry began with the identification of contextual issues that pre-existed at the NMK. This entailed engaging the research group in a type of organisational analysis to identify structural and cultural constraints to organisational learning and sustainability at the NMK. To achieve this, I implemented three main research events during the months of April and May 2005 as summarised in Table 6.1.

Table 6.1   Major research events of the first cycle of inquiry

Research Event	Date	Description of Research Theme and Focus	No. of Participants
W1	21/04/05	Start-up workshop which, introduced the study to the participants, negotiated terms of participation and identified contextual issues for deliberation and action.	**12**
FG1	27/04/05	Validation of W1 initial findings and critical questioning of identified contextual issues.	**13**
FG2	04/05/05	Critically explored basic assumptions and values underlying the NMK, interpreted the meaning of *sustainability* within the context of the NMK.	**11**

Table 6.1 indicates the use of workshops (W) and focus groups (FG) as data-generation research techniques (see Sections 5.4.1 and 5.4.2). In addition to these two research techniques, I also used a research journal and audio-recording. I provide details on W1, FG1 and FG2 to point out how I generated data on contextual issues within action research iterative processes of planning, action and reflection.

Planning for the start-up workshop (W1) involved securing a venue, purchasing stationery, developing workshop activities, ensuring provision of meals and sending out invitations to the participants. I formally invited workshop participants through a letter sanctioned by the NMK Director General on 15 April 2005. On the same date, I wrote a letter asking the Director General to officially open W1. The letter succinctly captured the activities of W1 as follows:

> During [W1], the research participants will be introduced to critical action research methodology and a systemic view of organisational change and sustainability. They will be then engaged in processes of envisioning a sustainable future NMK and identifying forces that may prevent the realisation of sustainability visions. Subsequent research meetings and workshops will be held in which action plans for implementation will be developed to contribute to the ongoing organisational changes at the NMK.
> (Extracts from letter to Director General dated 15/04/05)

The Director General, hereafter referred to as C1[48] (see Appendix 2, p. 399) was unable to officially open the workshop due to other commitments. C1 delegated the task to the Director of Research and Scientific Affairs who in turn delegated the responsibility to C6, an Assistant Director for the Centre of Biodiversity.

Workshop 1 activities included opening remarks by C6, the introduction to the study, negotiating terms of participation, envisioning a sustainable future NMK, identifying contextual issues and reflecting on the workshop process. In her opening remarks, C6 thanked the participants on behalf of C1 for volunteering their time to participate in the study. She assured us of NMK support and cited the commitment of the organisation to implementing organisational changes as envisaged in the Museum in Change Programme. She underscored the need for the study to foster a deeper understanding of the interdependence of NMK departments, environment and sustainability issues within the research group. I assumed the role of a critical action researcher and introduced the study to the research group through a powerpoint presentation. I articulated the research aims and the planned cycles of inquiry of the study. This was followed by a session in which the participants negotiated the processes and terms of participation towards fostering democratic deliberations in a community of practice (see Sections 3.4.3 and 3.4.2). The negotiation session aimed to set conditions for democratic deliberations to enable organisational learning and sustainability at the NMK (see Section 4.4.3 and 8.4.3). This is because under the right conditions, deliberation has the potential to expand perspectives, promote tolerance and foster understanding within a community of practice in the context of enabling social change and the emergence of sustainability (Chambers, 2003; see Sections 7.5 and 8.4). During W1, deliberation was used to identify contextual issues as reported in Chapter 7 (see Section 7.2). The research group as a community of practice expected me to adopt the following principles (W1, 21/04/05):

- *To observe ethical principles during the study* (see Section 6.7)

  I promised respect for truth, persons and democratic values. For me democracy was an ongoing, social learning process of addressing sustainability issues at the NMK

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[48] I have used the pseudonym C that stands for 'Corporate agents' (Archer, 1995; see Section 3.2.3) to conceal identities of non-research group participants who were mainly drawn from the NMK top management. Appendix 2 lists corporate research participants in order of their power and influences at the NMK.

with all the participants. A13 emphasised the need for me to avoid the use of a voice recorder when a participant felt uncomfortable about it.

- *To build trust among members of the research group*

  A17 suggested that if a member with sensitive information felt trust had not been established, I was to hold a one-on-one informal meeting with that member. Fortunately, no such situation arose. Building trust was central to cultivating the research group as a community of practice to enable organisational learning and sustainability at the NMK (see Section 4.2.2).

- *To communicate research findings within the NMK and wider international audience*

  In my role as a member of the NMK, I communicated research findings to the NMK through reports and internal seminars. As the critical action researcher, I shared research findings in many conferences and seminars as one way of ensuring validity and trustworthiness (see Sections 5.5.3 and 6.6.2).

- *To acknowledge research participant contributions through existing NMK administrative channels*

  I sent motivational letters that were sanctioned by the NMK Director General following implementation of every workshop (W1–W4) to participants. I also acknowledged the contribution of the research group when disseminating research findings in conferences and seminars outside the NMK.

- *To provide meals and snacks during workshops and focus group meetings*

  Since participation in this study had no direct financial benefits, I made efforts to provide meals as a way of appreciating involvement. In appreciation of our contribution to the Museum in Change Programme the NMK top management met the meal expenses of our second (W2) and final workshops (W4).

- *To hold informal meetings with non-team members whenever necessary*

  I had informal meetings and interactions with other employees (see Section 5.4.9) to reconfirm some of the insights that emerged from workshops and focus group meetings.

- *To ensure the confidentiality, safety and security of generated data*

  The research group expected me to ensure confidentiality and safety of generated data especially when using public computers at the NMK (see also Section 6.7).

For my part, I expected the following commitments from the research group participants as members of a community of practice at the NMK to (W1, 21/04/05):

- *To attend workshops and other research sessions whenever possible*
  Most members of the research group (e.g. A1, A4, A9 and A15) were involved in the Museum in Change Programme alongside their daily workload at the NMK. In view of that, I did not privilege attendance at my research sessions above other NMK meetings. Furthermore, I did not exert pressure on members of the research group to attend my research activities.

- *To actively take part in social learning activities through thinking, planning and action*
  Social learning processes of participation and social change in a community of practice were central to the exploration of organisational learning and sustainability as reported in Chapters 7 and 8 and discussed in Chapter 9.

- *To participate in initial data analysis by validating the findings*
  I provided the research group with opportunities to review raw data, analyses and reports (see Sections 5.5.3 and 6.6.1). This contributed to the quality and trustworthiness of the findings presented in subsequent chapters (see Section 5.5 for more details).

- *To share and communicate emerging findings*
  I expected members of the research group to share and communicate insights from the study with other NMK employees through their networks at the organisation. Many members of the research group, by virtue of their positions, belonged to other communities of practice at the NMK (see Section 9.5.1).

After negotiating the conditions of participation, I engaged the participants in a workshop group activity of envisioning a sustainable future for NMK (see Section 7.3.1 for details). We discussed values, influences, opportunities and pathway associated with achieving a sustainable future for NMK. The envisioning exercise was followed with another group activity that engaged the research group in a form of organisational analysis in which they identified contextual factors that both enabled and constrained social change and the

emergence of sustainability (see Section 7.2). Towards the end of W1, I asked the research participants to make comments on the workshop activities and processes as a form of evaluation. Unlike subsequent workshops (W2–W4), I did not use an evaluation form to collect reflections from the participants.

The participants (e.g. A6) thought that the study had come at the right time when the NMK was undergoing major structural and cultural changes. A12 pointed out that the study 'provided an opportunity for us to critically reflect on our previous organisational practices'. For A16, 'participating in the study provided a good forum for those who do not belong to any committee at the organisation for exchanging ideas on change and sustainability'. A7 had this to say: 'It is coming out very clearly from this workshop that small things count; we do not have to wait for big things'. A7 alludes to the significance of high leverage changes in an organisation that is associated with a systems-thinking perspective introduced in Chapter 1 (see Section 1.5.6; see also Senge, 1990). This research identified improving communication and information flows as a high leverage point for enabling social change and the emergence of sustainability at the NMK (see Section 8.2).

Critical questioning of contextual issues

W1 was followed with two focus groups (FG1 and FG2). Planning and implementation of FG1 and FG2 followed the same process of conducting focus groups as described in Chapter 5 (see Section 5.4.1). W1 was highly structured but FG1 and FG2 provided participants with opportunities for in-depth deliberations on contextual issues (see Section 5.4.1). Focus groups as interactive group discussions 'were more intense and made one to think deeply' about identified sustainability issues (A12). During FG1, I reviewed W1 initial findings to enhance trustworthiness (see Section 5.5.3). I then subjected some of the contextual issues that the participants identified in W1 to critical questioning. This surfaced basic assumptions and values underlying the NMK. Our reflexive deliberations generated useful insights into organisational learning and sustainability as reported in Chapter 7.
In order to hold FG2 on 4 May 2005, I had to change my departure date for Sydney from 1 May to 8 May 2005. This change was requested by some members of the research group who were concerned that we had not fully exhausted our deliberations on key contextual

issues such as governance and leadership. This confirms that the research group, to some degree, dictated the pace of this study. The following journal entry verifies this claim:

> I am happy that the research team has been more proactive and in most cases is dictating the pace. Power relationships are balanced as I do not appear to have more understanding of the contextual issues than the group members.
> (Journal reflection, 04/05/05)

During FG2 I engaged the participants in critically exploring assumptions, values and power relations that underpinned governance and leadership at the NMK (see Section 7.3). Attempts were made to interpret the concept of *sustainability* in the context of enabling organisational changes at the NMK. I posed three questions to engage the participants in reflecting on the meaning of sustainability:

- What do you understand by *sustainability* within our context?

- What is it that we want to sustain?

- What are our strengths and weakness as regards sustainability issues?

Responses to these questions are examined in Chapter 7 (see Section 7.3.2) to provide interpretations of the meaning of sustainability in the context of NMK. The next section outlines some of the social learning outcomes that emerged from the first broad cycle of inquiry.

6.3.4 Social learning outcomes

A number of social learning outcomes emerged from the first cycle of inquiry. The outcomes are based on critical reflections and reflexivity on collective actions during W1, FG1 and FG2. This journal entry captures one example of such a reflection:

> One thing emerged after our first meeting with the research group: there exists … a great amount of commitment, of readiness to address contextual issues related to organisational learning and sustainability. If this amount of commitment can be transformed into organised, efficient action; then change and sustainability will be possible at the NMK.
> (Journal, 22/04/05)

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This journal reflection implies the emergent reflexive powers that existed within the research group as a community of practice. Emerging social learning outcomes confirm how new social relations in the research group were formed, negotiated and sustained around collaborative activities of improving organisational learning and sustainability practices (see Section 4.2.2). These outcomes were the:

- *Establishment of a community of practice*
  The research group formed during W1 is similar to a community of practice (see Section 4.2.2). The commitment of the group and the NMK support that I gained enabled me to successfully complete the research (see Section 10.2).

- *Creation of enabling conditions for social participation*
  The terms of participation that I negotiated with the research group during W1 guided our communicative interactions throughout the study. Participation within the community of practice that I established followed democratic conditions articulated in Chapter 4 (see Section 4.4.3) and established in Chapter 8 (see Section 8.4.3).

- *Deeper understanding of contextual issues at the NMK*
  Communicative interactions during W1, FG1 and FG2 yielded useful insights into contextual issues related to organisational learning and sustainability. These issues were anchored in the structural and cultural domains of the NMK and operated to influence the learning capabilities and reflexivity of participants to address sustainability issues (see Chapter 7).

- *Learning at personal level*
  Following the first cycle of inquiry I gained a deeper understanding of contextual issues at the NMK. As a learner in this research process, I came to realise how limited my knowledge was about contextual issues at the NMK. This journal reflection authenticates this:

  > As a facilitator, I have been struggling to stay on top of things. I have realised that I do not have an in-depth understanding of contextual issues related to organisational learning and sustainability at the NMK. (Journal, 04/05/05)

This reflection highlights the limits of my thoughts on contextual issues at the NMK as the researcher. As a form of *epistemological vigilance*[49], this study has adopted a type of reflexivity that examines the social conditions of possibility of enabling organisational learning and sustainability in a community of practice (Bourdieu, 2004; see also Section 5.5.1). The next section explains research processes of the second broad cycle of inquiry which deliberated and explored possibilities for social change and the emergence of sustainability.

6.4   Second cycle of inquiry: deliberating and acting on contextual issues

The second cycle of inquiry required implementing communicative interactions, as processes of social and socio-cultural interactions at the NMK (see Section 3.3.1). Social and socio-cultural interactions at the NMK resulted from environmental education processes that were aimed to develop the learning capabilities and reflexivity to address sustainability issues. This cycle of inquiry therefore corresponds to the second phase of the Archerian morphogenetic cycle described in Chapter 3 (see Section 3.3). It was conducted at the NMK between 05 September 2005 and 09 March 2006. It lasted for six months with a total of nine focus groups (FG3 – FG11), two interviews (I_1 and I_2), one workshop (W2) and several informal meetings being held. Throughout the cycle I undertook several action research cycles to generate insights into organisational learning and sustainability as reported in Chapter 7 (see Sections 7.4 and 7.5). In the next sections I outline the planning stage of the cycle and report on how data was generated through deliberating and acting on contextual issues identified in the first cycle. Finally, I highlight social learning outcomes that emerged from our deliberations and actions.

6.4.1 Planning stage

Initial planning for the second cycle of inquiry involved securing funding from the Graduate School of the Environment to meet fieldwork expenses, and making contacts with

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[49] To achieve *epistemological vigilance*, Bourdieu (2004) encourages researchers to adopt a reflexive attitude towards their research by reflecting upon how their social and cultural background, position within particular fields and intellectual bias shape the way they view the world. Following Bourdieu, I *objectified* my own position in the NMK community of practice, de-familiarised my own view of the world and saw and heard what was *objectively* identified as being present.

the research group. Before travelling to Kenya on 2 September 2005, I sent an e-mail to the research group members to inform them of my planned field trip and to assess the progress on changes at the NMK. I also asked them to suggest a contextual issue to focus on and a possible date for our first focus group meeting. A4 (group leader) sent me the following e-mail response on behalf of the group:

> The pace at the NMK has gone a notch higher. The Minister formally launched the Museum in Change process which in essence is all about restructuring and the whole concept of change. I believe this falls neatly within our discussion/focus group … We can slot a meeting sometime the second week of September. We can zero in on internal communication as this is very important in our efforts to provide quality services to the various public and is closely related to strategy of brand identity for Nairobi Museum.
> (E-mail communication, 11/08/05)

In Chapter 5 (see Section 5.4.8), I mentioned that e-mail communications with the research group was a useful research technique for generating data while away from the NMK. The response from A4 confirms the role of the research group in making decisions related to the research process. Following this response, I tentatively planned research activities on improving communication at the NMK. In the next section, I report on how I engaged the research group in deliberating and acting on contextual issues that were related to communication and information flows, decision-making processes, leadership, staff development and financial management.

6.4.2 Data generation: interventions for organisational change

The second cycle of inquiry involved deliberating and acting on some of the identified contextual issues to enable social change and the emergence of sustainability. It built on the research activities of the first cycle of inquiry and was accomplished through nine focus groups (FG3 – FG11), two semi-structured interviews (I_1 and I_2) and one workshop (W2), as shown in Table 6.2.

Table 6.2   Major research events of the second cycle of inquiry

Research Event	Date	Description of Research Theme and Focus	No. of Participants
FG3	15/09/05	Explored the issue of poor internal communication and information flows at the NMK.	**13**
FG4	29/09/05	Developed collective actions towards improving communication and information flows.	**13**
FG5	13/10/05	Developed collective actions on prioritised strategies for improving communication.	**15**
FG6	01/11/05	Explored power issues associated with information sharing and examined components of the NMK donor-driven support programme.	**15**
FG7	10/11/05	Critically reflected on power relationships within the NMK Support Programme.	**8**
I_1	06/12/05	Interviewed C5 to validate emerging findings on various contextual issues at the NMK.	**1**
I_2	09/02/06	Interviewed C13 to validate findings on issues related to information flow and communication.	**1**
FG8	09/02/06	Deliberated on how decisions were made and implemented at the NMK. Undertook collective planning for W2.	**15**
FG9	16/02/06	Critically reflected on the perspective of Museum in Change Programme in the context of this study.	**12**
FG10	22/02/06	Deliberated on issues of leadership and revenue generation at the NMK.	**15**
FG11	03/03/06	Deliberated on issues related to staff motivation and development. Critically reflected on a presidential visit at the NMK.	**15**
W2	08/03/06	Fostered social learning through interactions between the research group and top managers.	**25**

Table 6.2 shows major research events of the second cycle of inquiry and the themes of these events. Based on these themes, I provide details on how data were generated through processes of communicative interactions in the NMK research group as a community of practice.

Deliberating on issues of internal communication and information flows

After arriving in Kenya on 3 September 2005, I first held informal discussions with the research team to find a suitable date for holding Focus Group 3 (FG3). It was agreed to hold the focus group on Thursday 15 September 2005. On 13 September 2005, I paid a

courtesy call on the NMK Director General to inform him about the start of the second cycle inquiry. I then planned for FG3 as indicated by this journal entry:

> Circulated invitation letters to all the team members; the letters had a provisional framework for today's meeting … Formulated the key question that is to guide our first focus group during this stage as: How can we address poor communication and work culture to bring about cultural change at the NMK?
> (Journal, 14/09/05)

As mentioned in Chapter 5 (see Section 5.4.1; see also Appendix 3, p. 401), I used a set of questions (framework) to guide our deliberations during focus groups. The framework for FG3 contained a series of questions for the research group to enable the participants *read* the complexity of the communication issue at the NMK (see Appendix 3 for the questions). As mentioned in the previous section, the research group prioritised poor communication as a sustainability issue that required urgent action. It was anticipated that the issue of communication would lead to a focus on other issues such as poor governance, financial management, staff training and motivation (see Section 8.2). From our deliberations, it emerged that poor internal communication and information flows at the NMK were a deeply entrenched issue that needed addressing to enable change and sustainability (see Section 8.2.1).

During FG4, I engaged the research participants in reflecting on ways of improving communication and information flows. The participants identified a number of strategies, as reported in Chapter 8 (see Section 8.2.2) and prioritised four for urgent action. The four were: revitalising the NMK newsletter, improved use of available information channels, management staff briefings and the use of the internet. To explore social learning process that occurred during our reflexive deliberations on poor communication, I asked the participants to state what they had learned during FG4 (see Section 8.2.3 for details). As an example, A8 learned that 'given opportunity, people can initiate change' whereas A1 learned that 'the culture of secrecy' is prevalent at all levels of the NMK.

Two weeks later, FG5 was held on 13 October 2005. FG5 involved the participants in collective action planning based on the four prioritised strategies for improving internal communication and altering information flows. During FG5 I asked participants to reflect

on whether they were comfortable with the research as in *process reflection* (Mezirow, 1991; see Section 4.4.3). They reported that they were comfortable with the research process. A6 found the process 'a practical eye opener full of knowledge and experiences' while A10 was comfortable with the 'way issues have been articulated'. A19 was comfortable with the research process because 'cultural change must start in a small way, sort of evolution rather than radical. In this group we are going to change'. A4 had this to say

> I am comfortable with the direction this research is taking because: there is sincere commitment for change; ideas are viable and achievable; and the focus is clear. What worked well for me is the level of team building, shared vision and the ideas flowing freely.
> (FG5 reflections, 13/10/05)

These positive reflections from the participants energised me into exploring the social reality of organisational learning and sustainability, in order to transform it (see Section 5.5.2 for catalytic validity). The reflections served as a catalyst for exploring possibilities for social change in the context of enabling sustainability as reported in Chapter 8.

Inquiring into the Museum in Change Programme

For our next focus group (FG6), the participants requested that I invite C8 to share insights into the European Union (EU) funded NMK Support Programme. As stated in Chapter 2 (see Section 2.3.2) the EU funded aspects of the Museum in Change Programme under the auspices of the NMK Support Programme. C8 was an employee of the NMK who had been seconded to the NMK Support Programme as a public programme team coordinator in 2005. Although the activities and plans of the NMK Support Programme were part of the Museum in Change initiative, the programme was not well understood by many of the NMK employees including the research group (see Section 7.4.1). This research was interested in exploring the complex ways power operated within the Museum in Change Programme as reported in Chapter 7 (see Sections 7.4.2).

Planning for FG6 required me to hold an informal meeting with C8 to explore the possibility of him participating as requested by the research group. This journal entry confirms this aspect of FG6 planning.

> I eventually held an informal meeting with [C8] regarding his participation in our next focus group meeting. [C8] warmed up to the idea of our contribution to the Museum in Change processes. I learned that there was a lot going on in the NMK Support Programme. We decided to have the focus group on 01/11/05 between 0930 hr and 1300 hr. [C8] claimed that many people at the NMK required being pushed to make contributions to the ongoing changes.
> (Journal entry, 17/10/05)

This assertion by C8 that many employees had to be pushed in order to participate in the Museum in Change process reveals agential constraints to organisational change as reported in Chapter 7 (see Section 7.2). During FG6, C8 made a presentation on the NMK Support Programme in which he highlighted key components of the Museum in Change Programme (see Section 2.3.2). His presentation was followed by a question-and-answer session. This deepened our understanding of the NMK Support Programme (see Section 7.2.3). To probe further power relations within the NMK Support Programme I held FG7 on 10/11/05. Chapter 7 shares findings on power relations that emerged from FG7 (see Section 7.4.2).

Deliberating on decision-making processes

A focus of this study is on the political and social dimensions of sustainability (see Section 4.4.1), and consequently in FG8 I engaged the research group in exploring decision-making processes at the NMK. We discussed ways of improving decision-making processes, as reported in Chapter 8 (see Section 8.3). This was aimed at turning the NMK into a *deliberative institution* towards institutionalising social change processes and the emergence of sustainability (see Sections 8.3.1 and 8.7). During FG8 we also reflected on the progress of the Museum in Change Programme with a view to delineating organisational changes, as reported in Chapter 8. A4 provided an overview on the changes in communication improvement (see Section 8.2.3) and this according to A7 'opened avenues for discussion'. Reflexive deliberations during FG8 yielded useful insights into decision-making processes at the NMK as shared in Section 8.3. FG9 was held to further deliberate on decision-making processes at the NMK with a focus on the causes of the 'disconnect between the top management and middle level staff' (A15). FG9 also explored participant views and perspectives on the concept of Museum in Change (see Section 7.4.1)

Deliberating on issues of governance and financial management

Improving leadership and governance[50] is central to enabling social change in the context of achieving sustainability (Doppelt, 2003). In FG10 we deliberated on issues of governance and financial management. I asked the participants to share their views on the type of leadership that they associated with enabling organisational change. In groups, the participants deliberated ways of putting leadership and decision-making processes in the hands of the NMK employees. I report on findings from the group discussions in Chapter 8 (see Section 8.3). During FG10 we also deliberated ways of improving revenue generation, with a view to reducing donor dependency at the NMK (see Section 8.5). I invited C13 from the Kenya Museum Society (KMS) to attend, as both a resource person on revenue generation and as, a critical friend. C13 was the Grants Coordinator of KMS that collaborates with the NMK through provision of development grants. I also used FG10 to reflect and evaluate on the research progress in terms of its contribution to organisational learning and sustainability. This is consistent with the action research cyclical processes of planning, taking collective action and reflecting on social learning outcomes, which underpin this study.

The participants felt that the research was moving in the right direction in the context of contributing to social change and the emergence of organisational learning and sustainability at the NMK. A10 reflected that we were making progress towards cultural change at the NMK given that 'most of the participants who are also heads of departments acknowledge this effort'. In the words of A16, 'There is learning from different individuals and I feel challenged in areas where I have not changed'. A16 further acknowledged that the research gave her 'the energy/morale to do my best for the NMK'. A12 is optimistic about enabling social change at the NMK when he reflects that 'we are getting somewhere and if what we put across will be effected, cultural change in our institution will be realised even if it takes years'. The reflection by A12 supports Archer's (1996) argument that it is possible under well-organised socio-cultural conditions to hold back social change for months or even decades, but that in the long-run it becomes impossible.

Deliberating on issues of staff motivation and development

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[50] Governance as used here refers to how decisions are made, information is shared and resources are distributed at the NMK (Doppelt, 2003; see also Section 2.2.2). Following Elkington (1999), a good governance system at the NMK should be participatory, tolerate diversity, mobilise resources to foster sustainability, support equality and be service-oriented (see also Section 8.3).

Focus Group 11, which was the last focus group meeting of the second cycle of inquiry, deliberated issues of staff motivation and development. Focus Group 11 was held two days after a presidential function at the NMK in which the Kenyan President laid a foundation stone to officially and symbolically launch the Museum in Change Programme (see Figure 6.2).

Figure 6.2   Presidential launch of the Museum in Change Programme

Source: Photo taken during the official launch of the Museum in Change Programme on 01/03/06

Figure 6.2 shows the President of Kenya shaking hands with the Head of the European Commission to Kenya after unveiling the foundation stone at the Nairobi Museum. Looking on are the Vice-President of Kenya and the Minister for National Heritage among others. During FG11 the participants and I critically reflected on the presidential function to explore power relations within the Museum in Change Programme. The different dimensions of power that operated within the Programme were evident during the function (see Section 7.2.2). For example, the President used his executive powers to announce a pay rise for the NMK employees. He also reiterated the commitment of the Government to support the Museum in Change Programme, as reported later in Chapter 8 (see Section 8.4.1). Focus Group 11 also identified key lessons from the presidential function with

regard to enabling social change and the emergence of organisational learning and sustainability at the NMK (see Section 7.4.3).

Focus Group 11 further explored possibilities for motivating the NMK staff to enable social change. This question was used to stimulate dialogue in the research group – *How can the NMK staff be motivated and developed to contribute to the Museum in Change Programme?* Responses to this question are reported in Chapter 8 as insights into staff motivation and development at the NMK (see Sections 8.4). Towards the end of FG11, I engaged the research group in collective planning for Workshop 2. As part of the evaluation, the participants reflected on the role of focus groups in enabling social learning processes, as outlined in Chapter 5 (see Section 5.4.1).

Workshop on changing patterns of thinking for Museum in Change
Chapter 5 (see Section 5.4.2) focused on workshops (W1, W2, W3 and W4) as a research technique for fostering dialogue between the research group and the NMK top management team (see also Section 8.4.2). Workshop 2 was the last research event in the second broad cycle of inquiry. The workshop was attended by 25 participants, comprising 15 members of the research group and 10 non-research group members. The 10 non-research group participants included C1, C2, C3, C4 and C5, who were members of the Directors Executive Committee (see Appendix 2, p. 399 for details). Implementation of W2 followed the action research cycles of planning, action and reflection, as in all other research events.

Planning for W2 was a collective activity started on 16 February 2006 during FG9 by identifying the theme for the workshop – *Changing patterns of thinking for Museum in Change.* I developed a framework that later guided our discussions on the content and structure of the workshop during the FG11 session. It was agreed that the workshop adopt a group discussion format with guiding questions to stimulate dialogue with the top NMK management team. We chose group facilitators (A5, A6, A7, A9 and A20), who were to use the questions to enhance the dialogue. This aimed at avoiding personalisation of any sensitive question asked during the workshop sessions (see Section 6.7.4). I developed a tentative programme that was circulated to the group for further refinement (see Appendix

4, p. 402 for details). As in W1, invitation letters to the participants were endorsed by the NMK Director General (C1).

Five sessions, as outlined in the programme in Appendix 4 formed the basis of W2 (see also Section 5.4.2). Consistent with principles of critical action research underpinning the study, I shared the responsibility of facilitating these sessions with A9, A3 and A16. C1, A4 and C7 assumed the role of resource persons and shared their knowledge on organisational change. In the first session, A9 engaged the group in a warm-up activity aimed at diffusing dominating power influences amongst the workshop participants. Using a powerpoint presentation, I provided an overview of the workshop and shared preliminary findings from the study. During the second session, C1 shared his vision of the Museum in Change Programme and the challenges of enacting holistic changes in the organisation. Group discussions and interactions formed the activities of the third session of W2. Group discussions aimed at promoting social learning processes through democratic deliberations amongst the participants who included the NMK top management team (see Section 8.4.3 for details). Drawing upon guiding questions (see Appendix 4, p. 402) the group facilitators fostered social learning during the session as follows:

Group 1:   A7 facilitated dialogue between the group members (A12, A22 and I) and C4 on issues related to financial management at the NMK (see Section 8.5).

Group 2:   A9 facilitated dialogue between the group members (A15 and A18) and A20 on issues of staff motivation and development (see Section 8.4).

Group 3:   A6 facilitated dialogue between the group members (A2, A3 and A17) and C2 on issues related to research linkages and partnerships at the NMK (see Section 8.6).

Group 4:   A5 facilitated dialogue between the group members (A16 and A4) with C9 on the role of regional museums in addressing sustainability issues within the local communities that they serve (see Section 8.6). C9 represented the Director of Regional Museums, Sites and Monuments at the workshop.

Group facilitators (A5, A6, A7 and A9) shared their group findings in the plenary. This generated further deliberations that enhanced the learning capabilities and reflexivity of

participants to address sustainability issues. The following reflection by A4 confirms this claim: 'Dialogue with senior management was open, sincere and honest. It … has given me a good grasp and understanding of the challenges, vision and focus of the NMK leadership'.

During the fourth session, C7 and A4 assumed the roles of internal resource persons and shared ideas on what organisational change entails at the NMK. C8 shared the challenges of enacting change in organisations and A4 presented on systemic thinking and organisational change (see Sections 1.5.6 and 4.4.4). In the final session of W2, A16 summarised key points from all the workshop sessions. I then asked the participants to evaluate the workshop processes by filling in evaluation forms, requiring them to state the high points of the workshop, areas for improvement, the dialogue with senior management and key insights gained during the workshop. Participant reflections confirm that social learning processes emerged from deliberations during W2 (see Section 8.4.3). For example, A15 gained insight into the different change components at the NMK and learned that 'change can be attained'. In the next section I outline broad social learning outcomes that emerged from the second cycle of inquiry.

6.4.3 Social learning outcomes

This research process focuses on insights into the social and socio-cultural interactions that arose from educational interventions of addressing sustainability issues within the NMK community of practice. Social learning outcomes encompassed both the issue of participant development, and the issue of participants coming to know about themselves and what it meant to foster a sustainable NMK (see Section 4.2.2). The following broad social learning outcomes emerged from the communicative interactions in the second broad cycle of inquiry (see Chapter 8 for details):

- *Generation of new ideas and values on sustainability*
  Through dialogue the participants generated ideas and values towards improving internal communication, governance systems, staff development and financial management at the NMK (see Sections 8.2.2; 8.3.2, 8.4.2 and 8.5.2).

- *Deep and critical understanding of contextual issues*

  The participants gained a deeper understanding of contextual issues related to organisational learning and sustainability as presented in Chapter 8.

- *Improved dialogue and reflexive deliberations*

  As mentioned earlier, communicative interactions (e.g. during W2) improved dialogue amongst the research participants (see Section 8.4.3 for details) and enhanced the learning capabilities and reflexivity of participants to address sustainability issues (see Section 9.4.2).

- *Learning of new relations*

  Interactions between the research group and top NMK managers during W2 led to the formation of new social relations that fostered collective learning and social change (see Section 8.4.3). A6 verifies this claim when he reflects: 'There was more openness from the top management who participated in [W2]; discussion was very friendly and interactive'. This confirms Lave and Wenger's (1991) argument that the social structure of organisational practice and existing power relations define possibilities for social learning processes (see Section 4.2.2).

In the next section I report on research processes of the third cycle of inquiry that sought to delineate social change processes and explore how to institutionalise those changes at the NMK.

6.5   Third cycle of inquiry: delineating and institutionalising change

Addressing sustainability issues through communicative interactions, as reported in the previous cycle, may lead either to social change (morphogenesis) or stability (morphostasis). The third cycle of inquiry aimed to identify the social and cultural elaboration that took place during the study. It corresponds to the third phase of the morphogenetic cycle. The cycle was undertaken between 18 September 2006 and 2 March 2007. It lasted for five and half months through five focus groups (FG12 – FG16), two workshops (W3 and W4) and several informal meetings with colleagues at the NMK. Throughout this broad cycle of inquiry, I undertook several action research cycles to

explore, with the research group, ways of institutionalising social change and the emergence of organisational learning and sustainability (see Section 8.7). In the next sections, I first outline how I planned for the third cycle research activities. I then report on how data were generated by engaging the research group in exploring how to institutionalise social change processes at the NMK. I end by outlining social learning outcomes that emerged from our communicative interactions.

6.5.1 Planning stage

Planning for the third cycle of inquiry entailed preparing a tentative research plan[51] for implementation during my final Kenyan field trip. I planned to realise the activities through six focus group meetings, two workshops and several informal meetings at the NMK. The final field trip to Kenya was linked with my participation in the 6th Botanic Gardens Conservation International (BGCI) Education Congress in Oxford, UK (see Atiti, 2006). The congress provided a useful forum for subjecting some of the findings from the previous cycles of inquiry to the scrutiny of peers as in dialogic validity (see Section 5.5.2).

6.5.2 Data generation: delineating and institutionalising change processes

The third cycle of inquiry sought to delineate social change processes (social/cultural elaboration) following the implementation of the Museum in Change Programme and environmental education processes at the NMK. I reported at the NMK for the final cycle of inquiry on 25 September 2006 and a date for our first focus group meeting (FG12) was fixed for 5 October 2006. I sent out invitation letters that were endorsed by the NMK Director General to members of the research group. Invitations were based on the sustained interest by the research group to participate in the study as shown in this extract.

> Following your continued willingness to take part in … the study … you are invited to participate in Stage 3 research activities towards institutionalising sustainability change at the NMK. These activities will be carried out between October 2006 and February 2007 through focus groups and workshops. The first focus group is scheduled for Thursday 5th October 06.
> (Invitation letter, dated 02/10/06)

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[51] During FG12 I engaged the research group in collective planning to further refine research activities in the tentative plan I had developed while at Macquarie University.

Except for A3 and A20, who had resigned from the NMK, none of the remaining group
members had expressed a wish to withdraw from the study. I describe data generation
processes based on five focus groups and two workshops as illustrated in Table 6.3.

Table 6.3   Research events of the third cycle of inquiry

Research Event	Date	Research Theme and Activities	No. of Participants
FG12	05/10/06	*Key success factors and lessons from previous change experiences* • Reflected on organisational change experiences since April 2006 • Reviewed research plan and activities	**12**
FG13	18/10/06	*Institutionalising organisational change at the NMK* • How effective has the NMK been in institutionalising change? • What are the key elements of institutionalising change?	**9**
FG14	01/11/06	*Team planning for workshop (W3)* • Explored branding as a tool for institutionalising change • Identified key lessons from previous training workshops	**13**
W3	28/11/06	*Institutional capacity building and sustainability* • Explored issues around staff development and training required to institutionalise change • Identified and prioritised fears of institutionalising social change processes	**15**
FG15	01/02/07	*Identifying incentives for continuous change* • How can we ensure sustained cultural change at the NMK?	**12**
FG16	08/02/07	*A critical review of the entire study* • Team planning for W4	**15**
W4	01/03/07	*Validation workshop (W4)* • Shared and validated key research findings • Made recommendations for further organisational changes	**17**

Reflecting on recent organisational change experiences

During FG12, we reflected and deliberated on organisational changes that had occurred at
the NMK since April 2006. Some of them included an improvement in internal
communication processes, development of a service charter, a pay rise increase and the

passing of the 2005 Heritage Bill by the Kenyan Parliament. These are examples of structural and cultural changes that emerged from the Museum in Change Programme. More details are provided in Chapter 8. FG12 evaluation activities asked the participants to share factors that they considered essential for any successful change. I also asked them to state what they had learned from FG12.

Deliberating on elements of institutionalising social change

FG13 and FG14 focused on identifying tools for institutionalising change in the context of sustainability and environmental education (see Section 8.7.2). From our deliberations, it became evident that the NMK had not been successful in institutionalising change processes. Apart from deliberating on key elements of institutionalising change, I used FG13 to collectively plan for W3. A structure similar to the one followed in implementing W2 was suggested. Through evaluation, I asked the participants to critically reflect on their participation during FG13, their role as change agents and insights gained as a team. Their written responses suggest that participation during FG3 was excellent and very interactive. This reflection by A19 supports the assertion: 'I feel my participation was active. I am happy with the team's overall participation'. A1 thought that his potential as a change agent had not been fully tapped at the organisation. According to A5 tapping such potential requires 'proper involvement' of employees in change initiatives (see Section 8.2.1). During FG14, A9 gave a powerpoint presentation aimed at providing insights into how branding can contribute to institutionalisation of change (see Section 8.6.2). This research identifies *branding*, a social marketing tool, as a key element for institutionalising change in the context of achieving sustainability. In the FG14 evaluation I asked each participant to reflect and state four things learned. I also asked the participants to suggest ways of deepening social learning processes during focus groups and workshop sessions. The following suggestions were made:

> The process can be deepened with the making of resolutions and declarations at the end of focus groups and workshops … Reflections should concentrate on the previous meeting resolutions and declarations in terms of achievability and implementation. (A19)
>
> Enhance consultative forums/discussions with target groups and promote frequent communication networks. (A6)

> The team learning can be deepened through more involvement and engagement of the top management in the proceedings and concerns. (A5)
> (FG14 participant reflections, 01/11/06)

These suggestions illustrate the creative role of the participants and the capability to use their reflexivity to enable social learning outcomes.

Workshop on exploring tools for institutionalising change

Workshop 3 was held to explore tools and skills for institutionalising change, identify and prioritise fears for institutionalising change and to promote social learning through critical reflections on the Museum in Change Programme (see Section 8.7). The theme of W3 was *Institutionalising sustainability change at the NMK* and it followed a similar structure to that of W2 (see Appendix 4, p.402). It was attended by 15 participants who included C1 and C5. C5 shared her reflections on the legal reforms component of the Museum in Change Programme. In groups the participants, explored issues around staff development and institutional capacity building in the context of institutionalising change and sustainability (see Section 8.7.2). In another session the participants worked again in groups to identify fears both at personal and organisational levels with regard to implementing and institutionalising change (see Section 8.7.2). The NMK DG (C1) reflected on the progress of the Museum in Change Programme before closing the workshop. At the end of W3, the participants completed evaluation forms to provide feedback on insights gained from the workshop, high points of the workshop, suggestions for improvement and the largest barriers to institutionalising change. 'Leadership, lack of information and resistance to change' (A4) and 'the inherent resistance to change by some key change drivers' (A5) were identified as some of the barriers to institutionalising change (see also Section 8.7.1). FG15 that I held on 01/02/07 engaged the participants in identifying incentives for sustaining change at the NMK. This research regards providing incentives for continuous change as an essential element in institutionalising change in the context of environmental education and sustainability (see Section 8.7.1)

Critical review and validation of the study

Focus Group 16 and Workshop 4 research events were used to critically review the entire study. We reflected on the entire process we had engaged with in the community of practice

over the time we had worked together. In Focus Group 16, the participants shared a number of key lessons that they had gained from the process in the form of written reflections and reflexive deliberations (see also Section 7.4.3). Some participants felt that organisational change is not easy and 'people will always resist change even though it is for their own good' due to the fear of unknown (A18). A2 appreciated that the entire study had helped her to learn a lot about the NMK – 'our weaknesses, as an institution have come out clearly'. For A5 the key lesson from the study is that 'human resource development is the engine' for delivering Museum in Change outcomes. A5 asserted that human resource development, as a component of the Museum in Change Programme needed to be 'addressed with the seriousness it deserves without fear or favour'. According to A9, 'The study was an eye-opener into dynamics of group work; how individuals view issues differently yet arrive at a conclusive consensus' These reflections by A9 support the notion of deliberative democracy that is central to my research (see Section 3.4.3). It is evident that engaging with communicative interactions as critical and reflexive environmental education processes were a successful way of developing a deeper understanding of change processes at the NMK.

I concluded the data generation phase of this study on 1 March 2007 by holding Workshop 4 to validate key findings from the study and to make recommendations for further organisational changes (see Section 10.4.1). As in Workshop 3, the NMK Director General (C1) closed the workshop. C1 shared his frustrations as the Project Manager of the Museum in Change Programme (see Section 7.4.2). The next concluding remarks by C1 confirm the importance the NMK management attached to this research:

> This is not just an ordinary exercise where we just come and brainstorm, leave and no action is taken. I believe [the research] is going to be a very good documentation of this process for the NMK Support Programme and the Museum in Change Programme. Because it is important that we document this, so that the next group of managers who are going to come and manage a programme like this have some basis for doing this.… This forms the history of this Museum as well. (Transcript extracts from W4, 01/03/07)

These remarks by C1 support the argument by critical realists that knowledge created by researchers, continue to exist even when the research activities which created the

knowledge cease (Archer, 1985, 1995; Willmott, 1997). This confirms the *objective* existence of emergent cultural properties in an organisation (see Section 3.2.5). In the next section I outline broad social learning outcomes that emerged from research events and activities of the third cycle of inquiry.

6.5.3 Social learning outcomes

Generally, implementation of the third cycle of inquiry deepened our understanding of how to enable organisational learning and sustainability at the NMK. As mentioned in Chapter 3, this study views both organisational learning and sustainability as dynamic social learning processes of change within a community of practice. Through the third cycle research activities the study sought to develop participant learning capabilities for institutionalising social change processes and the emergence of organisational learning and sustainability. The following broad social learning outcomes emerged from this cycle (see Chapter 8):

- *Improved learning capabilities within the participants*
  Critical reflections from the research events confirm that the learning capabilities of participants to address change improved. For example, A7 learned that 'dialogue and patience are two facets that need to be adopted for a strong team' (W4).

- *Generation of new ideas on institutionalisation of change*
  Our communicative interactions generated ideas on ways of institutionalising change in the context of achieving sustainability (see Section 8.3).

- *Deeper understanding of organisational change processes*
  Critical reflections on the activities of the Museum in Change Programme yielded insights into the complex reality of enabling social change at the NMK (see Section 7.5)

- *Learning of new social relations and building of trust*
  Working together as a community of practice fostered cohesion and trust amongst the participants. These comments by A12 confirm this, 'Since most of us have been together all through the research period we have become accustomed to each other. In fact the rhythm flow among the team members is fantastic' (W3). Wenger *et al*.

(2002) identify trust as essential quality to the cultivation of communities of practice as ideal structures for organisational learning (see Section 4.2.2).

I examine in the next section how data generated from all the three broad cycles of inquiry were analysed and interpreted.

6.6   Data analysis and interpretation

Analysing data from all the sources described in Chapter 5 and the broad cycles of inquiry described in this chapter presented a challenging task for me (Creswell, 2007). According to Alvesson and Sköldberg (2000) qualitative research should follow some well-reasoned logic in interacting with data and use of rigorous techniques for processing data. This critical action research study had collection and analysis spread throughout the life cycle (Huberman & Miles, 1998). I conducted data analysis as an activity simultaneously with data generation, data interpretation and narrative writing (Creswell, 2003, 2005). Data analysis involved moving away from the *action* components of the broad cycles I described earlier, to the *research* aspects where I focused on more systematic observing and reflecting (Burns, 1999). This was undertaken within cyclical processes that provided insights to guide further collection of data (Mills, 2007).

6.6.1 Cyclical processes of data analysis

As with any qualitative research, data analysis in critical action research comprises preparing and organising the data for analysis reducing the data into themes, representing the data in tables or discussion and validating the data (Creswell, 2007; Johnson & Christensen, 2004). According to Mills (2007), data analysis is an attempt to summarise generated data in a dependable and accurate manner. I undertook data analysis at two levels: interim and final data analysis. During the interim analysis, I reduced data and generated summaries for sharing with the research group (see Appendix 8, p. 411 for an example). I used interim analysis to develop a successively deeper understanding of organisational learning and sustainability and to guide each cycle of data generation (Johnson & Christensen, 2004). This enabled me to undertake a more in-depth final data analysis based on the theoretical foundations presented in Chapters 3 and 4. However, I

allowed data to generate prepositions in a dialectical manner that permitted the use of the theoretical frameworks without turning them into containers into which to pour the data (Lather, 1986). In what follows I discuss data analysis as cyclical processes of entering and managing data, coding and developing categories, identifying themes, presenting results and validating findings (see Figure 6.3).

Figure 6.3   Data analysis in critical action research processes
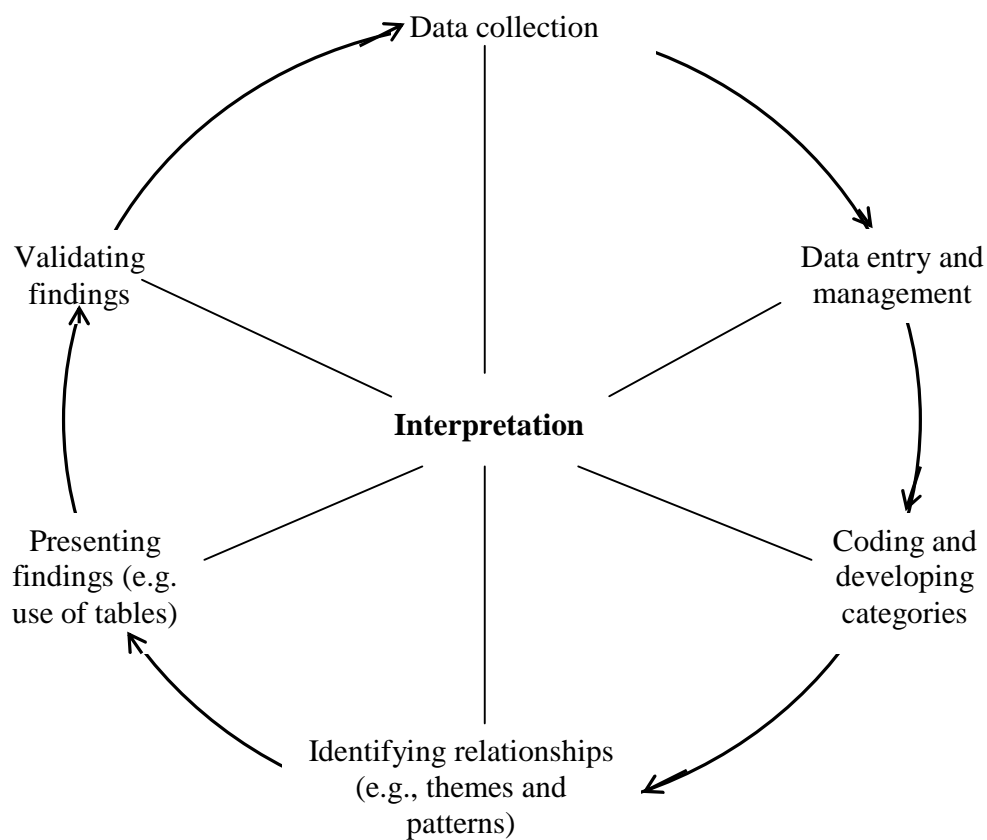
Source: Johnson and Christensen (2004, p. 501)

Figure 6.3 shows cyclical processes of data analysis, which Creswell (2007, p. 151) terms as "the data analysis spiral". These processes enabled me to interpret data as explained later in Section 6.6.2. I will explain how I have analysed the data within these cyclical processes.

- *Data entry and management*

  I began analysis during the early stages of the study by organising data into manual folders and computer files. Entering and managing data for analysis required transforming the audio recordings of focus groups, workshops and interviews into typed transcriptions. Data collection processes generated large quantities of data in the form of focus group transcripts, voice records, workshop reports, observational notes, photographs, journal reflections and document analyses (see Section 5.4 for data sources). This required a systematic, coherent process of data storage and retrieval. I electronically stored and managed data, backed up by manual files containing data from different sources, where possible. For each of the three broad cycles I kept separate electronic folders on my lap top that were backed up on a flash disk and a Macquarie University workstation desktop. For example, data from the second cycle of inquiry were entered and managed under a main folder entitled *Stage 2 work*. This main folder contained several subfolders on research events, research plans, research reports, transcripts and analytic memos, voice files, pictures and writing. Following the organisation of the data, I commenced analysis by reading transcribed data and writing *analytic memos*[52] in the margins of the transcripts, journal entries and workshop reports. I found writing memos to be a helpful tool for recording insights gained from reflection on the data as well as for pointing out the need for further data generation. The following memo verifies this claim.

  > The root causes of concealing information at NMK are emerging as individual fear; job insecurity and control of power. Since information is power, concealing it gives more power to those involved. But some of those who conceal information may do so out of inferiority or feeling insecure in their positions. Why did one of the team members suggest counselling for such individuals? I need to research further into power issues around information secrecy.
  > (Analytic memo on FG5, 15/10/05)

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[52] Analytic memos are the documents I wrote in order to systematise my thoughts on the various stages of my critical action research project (Johnson & Christensen, 2004, McKernan, 1991). Elliott (1991) suggests that such documents should be produced periodically. I wrote memos to record hunches that emerged during the research process, new concepts and discussion of difficulties experienced during data generation.

As suggested by this memo, the next focus group (FG6) explored power issues around information secrecy (see Section 6.4.2 and 8.4.1). Memo writing formed part of the process of coding and identification of themes on contextual issues and our communicative interactions.

- *Coding, developing categories and identifying themes*

    Creswell (2007) views coding as the core feature of qualitative data analysis. It is the process of identifying themes or categories that are in the data (Ezzy, 2002). *Thematic analysis* was therefore, central to the identification of themes on sustainability issues and social learning from the data. I induced categories into which I sorted themes emerging from journal reflections, focus group transcripts and workshop reports (see Appendix 7, p. 408 for sample on coding). The following journal reflection confirms this process:

    > I summarised key themes from Stage 2 focus group meetings; clarity is now emerging and I need to focus on the following thematic areas: communication improvement; leadership and governance; participation in decision-making; staff motivation and training; and resource allocation. (Journal, 12/04/06)

    Keeping a journal and regularly writing memos encouraged me to reflect continuously on the emerging understanding of organisational learning and sustainability data. The data was coded openly and manually by scrutinising focus groups transcripts and workshop reports. I compared themes for similarities and differences across data sources and categories. I merged similar themes and generated reports which I circulated to the participants. During this process, I grouped themes on key sustainability issues and social learning processes to reflect broader perspectives on organisational learning and sustainability. This process enabled me to identify morphogenetic relationships at the NMK in the context of implementing organisational learning and sustainability as reported in Chapter 7 (see Section 7.2.2).

- *Presenting findings*

    I have represented the findings in discussion of themes on change and social learning process in Chapters 7 and 8 with regard to enabling sustainability. Chapter 7 offers findings from the first cycle of inquiry whereas Chapter 8 presents findings from the

second and third cycles. When reporting themes on sustainability issues, I have made attempts to build a discussion that shows how the theme or category emerges from the data. Writing strategies include citing specific quotes using different sources of data to cite multiple items of evidence and providing multiple perspectives from the participants to embrace diversity and pluralism. I have made attempts to take the reader into the setting of the study through use of thick, rich descriptions (Patton, 2002; see also Section 5.5.3). Extracts from focus group and workshop deliberations are used to provide depth and complexity of exploring sustainability issues in context. Where appropriate I have used tables and boxes to represent findings (e.g. see Table 7.2 and Box 8.1).

- *Ensuring validity of findings*

  This entailed the use of validation strategies described in Chapter 5 (see Section 5.5). For example, there was negotiation of meaning that entailed recycling description, emerging themes and conclusions to the participants as in member checking (see also Lotz, 1996). I incorporated reciprocity and reflexivity in the research process not just as a method to validate data, but in order to develop participant learning capabilities to address sustainability issues at the NMK (see Sections 4.4.3 and 9.4.3).

I discuss how data from this research were interpreted and disseminated in the next section.

6.6.2 Data interpretation and dissemination of findings

According to Ezzy (2002, p. 73), qualitative data analysis is "an *interpretive* task". As shown in Figure 6.3, all the cyclical processes of data analysis I described in the previous section contributed to interpretation. In addition, data interpretation in this study is based on the interactions of the research aims and design, theoretical foundations and insights from social learning processes (Arksey & Knight, 1999). For example, insights from theoretical foundations of the study (see Chapters 3 and 4) informed data interpretation and discussion of the findings in Chapter 9. During the process of interpretation, I used reflexivity strategies proposed by Bourdieu (2004; see Section 5.5.1), and the contextual profiling work produced in Chapter 2 to form larger meanings of our communicative interactions at the NMK. I have interpreted social learning outcomes using the community of practice

approach, particularly Wenger's later work on cultivating communities of practice in and for organisational learning and change (see Wenger, 2000; Wenger *et al.*, 2002; see also Sections 4.2.2 and 9.5.1).

Using reflexivity as explained in the previous chapter (see Section 5.5.1) has helped to offset the dominant power-inscribed or *privileged position* constructions that all researchers take on when discussing their findings (see Hall, 1996). The participants did not have theoretical insights into organisational change in the context of environmental education and sustainability. Insights into processes of social change processes and the emergence of sustainability are to some extent distorted by the theoretical framework provided for such interpretation in this study. These, however, helped to minimise my own theory-laden views on organisational learning and sustainability, given the social realist perspective on *theories* that exist *outside* of the individual (Sayer, 2000). Such theories provide deeper ontological verification points for individual perspective. To broaden reliance on my own personal interpretations, I made attempts to use "thick, contextual, interactional, multivoiced interpretation" when reporting findings from the study (Denzin, 2001, p. 133; see also Section 5.5.3). This I hope will provide the reader with an opportunity to extend his or her understanding of the issue being explored (Stringer, 2007), and to locate these within a broader socialist realist view of knowledge.

Dissemination of research findings occurred throughout the life of this study at two levels. At the first level (the core action research project), interim findings were disseminated to the wider NMK community through workshop and stage reports. Three stage reports that corresponded to the three broad cycles were prepared and shared. See Appendix 8 on page 412 for an extract from Stage 2 report. I also shared the findings during the NMK annual scientific conference in November 2006. At the second level (the thesis action research project), I disseminated emerging findings to peers and international research community through three international conferences in an attempt to increase dialogue about research, its design and emerging outcomes (see Atiti, 2006, 2007a, 2007b). A manuscript submitted to the *Environmental Education Research* Journal has been accepted for publication (see Appendix 8 p. 413 for abstract).

Undertaking this critical action research inquiry required addressing ethical and political dilemmas as examined in the next section.

6.7   Addressing ethical and political dilemmas

In this section I address ethical and political dilemmas of undertaking a critical action research project at the NMK. According to Elliott (2005), any research that involves the participation of human subjects requires consideration of its potential impact on those involved (see also Stringer, 2007). Bassey (1995, p. 15) identifies three major ethical dimensions in the conduct of social research as "respect for persons, respect for truth and respect for democratic values". Addressing ethical and political dimensions in action research have been found problematic for those researching in their own organisations (Coghlan & Casey, 2001; Williamson & Prosser, 2002). For this study ethical and political dilemmas describe those issues that related to the relationship between the research process and the NMK community of practice, and its impact on the participants and the NMK (Elliott, 2005).

Before commencing this study in March 2005 I applied for ethics approval from the Macquarie University Human Ethics Committee[53]. In the application process I explained the risks and benefits of the study to the participants, details of the recruitment process, privacy and publication of the results, participant information and consent, possible conflict of interest and other ethical considerations (see Appendix 9, p. 414 for extracts from the application process). However, as a mechanism for assuring ethical research processes, the Macquarie University ethical guidelines were predicated on maintaining a distanced objectivist researcher stance. This action research project sought to reduce or eliminate the *researcher* and *researched* distinction as it was a dynamic and emergent process of interaction between social learning, action and reflection (see Section 5.3.1). Consequently, more ethical issues than I explained in the Macquarie University human ethics guidelines

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[53] Filling the ethics application forms is proving time-consuming. I have decided to use the process to engage with literature on the ethical dimensions of social research. The emancipatory intent of this project raises a number of ethical issues that may not be addressed by the formalistic approach within this application (Journal, 31/01/05).

were bound to emerge in the course of the research process (see Boser, 2006, 2007; Brydon-Miller & Greenwood, 2006). In the next sections I examine how I addressed emergent ethical and political dilemmas following a collaborative inquiry into organisational learning and sustainability at the NMK.

6.7.1 Participant selection and obtaining consent

At the beginning of this research process, I was faced with the ethical dilemma of whom to recruit for the research process. Naturally, I first approached those I had close working relationships with at the NMK (e.g. A3, A5, A7, A12 and A17) for recruitment before turning to other colleagues. The recruitment of research participants followed a democratic process that laid emphasis on voluntary enrolment and guaranteed the participant the right to withdraw from the research any time as a way of respecting their democratic values (see Section 6.3.2). Three colleagues who had accepted to participate in the research process dropped out before attending any meeting. I ensured that all those who participated in the research gave consent by signing the information and consent form (see Appendix 10, p. 417 for sample). This form highlighted the benefits and conditions of participating in the research process. Some colleagues declined to participate in the research process on realising that it had no direct financial benefits. Signing an information and consent form before involvement in a research project was a new procedure for many of the participants. Some colleagues who had initially accepted to participate in the study declined to sign the form on the grounds that they did not know the full scope of the research process (Boser, 2006). This confirms that informed consent cannot be assured in an action research process in the same way I described in the ethical application process that was based on conventional research. During the research process, I negotiated research activities with the participants at the start of each of the three broad cycles described in the previous sections (see Sections 6.3.3, 6.4.1 and 6.5.1).

6.7.2 Anonymity and confidentiality

I addressed ethical principles of anonymity and confidentiality during the ethical application process and the start-up workshop (see Section 6.3.3). All through the research process there was no secretive use of photography, audio recording or video recording. I

informed the participants the use of these research techniques at the onset of the study. Some participants (e.g. A13 and C5) were initially uncomfortable with having their voices on tape. Cultivating trust in the research group addressed this problem. However, A17 suggested during the start-up workshop (W1) that if a member with sensitive information felt trust had not been established, I was to hold a one-on-one informal meeting with that member. Fortunately, no such situation arose. I however faced the ethical dilemma of ensuring anonymity since the research process involved deliberative processes that exposed participant perspectives and positions on issues. Furthermore, the participants were expected to own the social change processes and the emergence of sustainability (e.g. see Section 8.2.3). Using pseudonyms to conceal the identities when presenting the research findings in this report has provided a degree of anonymity to the participants (see Section 5.4).

In the ethics approval process I stated conditions for the storage of data towards ensuring confidentiality. When negotiating terms for participation, the participants expected me to keep the data secure. Throughout the study, I ensured the safety of the data and held information from the participants in confidence. In terms of the research ethic of respect for truth, I kept a systematic and careful record of data (see Section 6.6.1) in order to safeguard my work from any accusation of untruthfulness. I was also truthful in data collection, analysis and reporting of findings. However, given that this research project was important for my own professional growth, I maintained my own intellectual right of reporting the findings to the wider research community, but in accordance with the ethical dimensions of respect for persons, truth and democracy.

6.7.3 Conflicting and different needs

In this research project my roles varied across many dimensions, from a fully participant in enabling social changes as a member of a community of practice, to the action researcher and also an employee of the NMK. Determining and maintaining the boundaries between these roles required constant alertness in addressing ethical dilemmas, which arose from conflicting and different needs of the research process. For example, during the second cycle of inquiry an expatriate volunteer (C15)who had been working at one of the NMK departments approached me to complain about poor working relationships he had

experienced with one of the research participants. C13 (Kenya Museums Society Grants Coordinator) had informed the volunteer about this research project on social change at the NMK. C15 complained to me about poor communication and working conditions at the department that was headed by one of the research participants, and the suspension of his volunteer services. I was faced with the dilemma of how to address the complaints since I had the responsibility to ensure that no participant is harmed as a result of the research process. On the other hand, C15 expected some action through the research process since the issues raised were central to this study. I raised the issue for deliberation during a focus group meeting (FG11) where it took another dimension. The research group attributed the animosity between C15 and the affected participant to a lack of policy guidelines on volunteer work and power struggles, which usually exist between expatriate volunteers and NMK employees. Reflexive deliberations on the issue helped to create transparency and dialogue that I required for sustaining ethical research relationships within the NMK community of practice. The issues raised by the volunteer were later addressed by the top NMK management.

Generally, I addressed emergent complex ethical dilemmas through honest and authentic relationships with the participants as respect for truth. I maintained my integrity as the researcher by being true to myself and acting in accordance with the NMK professional code of conduct and human research ethics. I endeavoured to establish and nurture trust and supportive relationships between myself and the participants. This was based on human values such trust, and a caring attitude that underpin sustainability principles that I sought to foster in the NMK community of practice. I acknowledged the fact that the participants had values that differed from mine. Through reflexivity, I remained aware of, and sensitive to the participant social positions, intellectual biases and the NMK context. There was a continuous evaluation of ethical codes with the participants using tools that reflected the dynamics of communicative interactions that I highlighted in Chapter 4 (see Section 4.5.4). For example, I encouraged the participants to think systemically when deliberating on sustainability issues so as to avoid dwelling on personalities and hence become accused of insubordination. Based on the assumption that knowledge is power (see Section 5.2.1), I embraced a democratic ideal of sharing responsibility of facilitating research processes within the participants.

6.7.4 Political dilemmas

Undertaking this research project at the NMK had its political dynamics given that doing critical action research in your own organisation is a political act (see Coghlan &Brannick, 2005; see also Section 1.5.2). According to Coghlan and Brannick (2005, p. 70),

> Action research has subversive quality about it. It examines everything. It stresses listening. It emphasises questioning. It fosters courage. It incites action. It abets reflection and it endorses democratic participation.

These characteristics challenged the status quo at the NMK since the organisation was defined by a top-down mode of governance (see Sections 8.3.1 and 9.3.2). Some participants thought that the research process was subversive by highlighting sensitive contextual issues. The following remarks made by A10, a Principal Curator at the NMK, verifies this claim:

> If this research works well, there are two options for you. One the NMK will accept you back; the other way since you are bringing out issues that are sensitive you may be forced not to come back (LAUGHTER IN THE GROUP).
> (Transcript extract from FG5, 13/10/05)

This confirms that in seeking to surface and challenge the basic assumptions and values underlying the NMK (see Sections 7.2 and 9.3), the research project entailed risk for me and the participants. The participants expressed this risk during the planning of Workshop 2 when they chose A5, A6, A7, A9 and A20 to facilitate dialogue with the top managers (corporate participants) on sensitive issues at the NMK (see Section 6.4.2). This was aimed at avoiding personalisation of any sensitive question asked during the workshop sessions.

Gaining support of the top NMK management, disseminating and writing reports were political acts. I experienced political dilemmas in sharing findings that challenged the status quo with C1 (NMK Director General) who was keen to be kept abreast on the research process. Not all Directors at the NMK supported the research project (see Section 5.4.2). Fortunately, the NMK General Director supported the research process for contributing to the Museum in Change Programme (see Section 8.4.2). My preunderstanding of the NMK power structures and politics enabled me to work in ways that did not compromise the

research project or my own career. This required balancing the goals of the core action research and thesis projects (see Sections 6.2.3 and 10.2).

To sum up this section, I reiterate that addressing ethical and political dilemmas of exploring organisational learning and sustainability at the NMK required a shift from looking narrowly at the impact of the research process to the participants. Instead, I considered the social learning context of the research process and the consequences of implementing communicative interactions in a historically constituted NMK environment. Taking on reflexivity enabled me to create transparency and dialogue that was required for forming and sustaining ethical research relationships in the NMK community of practice. I thus consider reflexivity as a useful technique for ensuring ethical research processes and practices in the context of enabling organisational learning and sustainability at the NMK (Etherington, 2007; see also Sections 5.5.1 and 10.2.3).

6.8   Summary

This chapter has reported on the critical action research processes of exploring organisational learning and sustainability at the NMK. I outlined the process of designing an action research project within my own organisation. The research processes were undertaken within three broad cycles of inquiry that also consider the Archerian morphogenetic cycles described in Chapter 3. I have described in detail the research events that I implemented within the three cycles. The first broad cycle generated data on contextual factors that pre-existed at the NMK which influence organisational learning and sustainability. The second cycle deliberated how to address some of the factors that constrained change in the context of sustainability. In the third cycle, I discussed data generation-processes on institutionalising change processes. Data generation in all the three cycles followed iterative processes of planning, acting and reflecting on learning outcomes. Throughout the cycles, I have pointed out key themes and evidence for social learning. The chapter has described cyclical processes of data analysis that led to interpretation. Underpinning these processes are data entry and management, coding and thematic analysis, representing findings and validation. I have pointed out how I addressed ethical dimensions associated with human research. Reflexivity is fundamental in understanding

how findings that I present in the next chapters are *selective, partial and positioned* within theory-laden views. These views are located in the in-depth literature review work that I undertook to establish a meaningful framework for this study. This ensures that the study is not located only in *my* personal theoretical *positions*, but in a broader knowledge base after Archerian social realism which recognises the existence of knowledge accumulated over time in society.

Part 4 presents findings of this study on contextual issues and social learning outcomes in a community of practice. In Chapter 7 I offer data from the first broad cycle of inquiry on a critical organisational analysis of the NMK. This analysis exposed contextual factors that influenced the learning capabilities and reflexivity of participants to address sustainability issues.

PART 4   Contextual Issues and Social Learning Outcomes

This part offers findings on contextual issues and social learning outcomes by drawing upon data generated from the three broad cycles of inquiry described in Chapter 6 (see Sections 6.3, 6.4 and 6.5). It addresses the following questions (see Section 1.3.1):

- What constitutes the *social reality* of organisational learning and sustainability?

- What are ways of *knowing* the social reality of organisational learning and sustainability?

The findings presented here are interpreted using lenses from the theoretical frameworks introduced in Chapter 1 (see Section 1.4) and discussed in Part 2. In addition, the findings are shared with reference to the shaping contextual influences described in Chapter 2. I share possibilities for social change that emerged from communicative interactions on addressing contextual issues and the Museum in Change Programme. In this part I also present findings on the institutionalisation of social change processes and the emergence of organisational learning and sustainability in a community of practice. I provide evidence of social change processes and the development of participant learning capabilities and reflexivity following the implementation of the Museum in Change Programme and communicative interactions at the National Museums of Kenya (NMK).

This part consists of the following chapters:

Chapter 7   Critical Organisational Analysis of the NMK

Chapter 8   Deliberating and Exploring Possibilities for Change

Chapter 7 Critical Organisational Analysis of the NMK

7.1   Introduction

The chapter draws on data from the first cycle of inquiry, to report on the contextual issues that I identified at the NMK with the research participants (see Section 6.3.3). Identification of these issues took a form of *critical* organisational analysis of the NMK as a social system. The process was *critical* in the sense that it distilled structural and cultural factors that *conditioned* agential learning capabilities to address sustainability issues at the NMK. This distillation allowed for an engagement in the reconstruction of possibilities for social change through critical questioning and envisioning a sustainable future for the NMK. In the first section of the chapter I offer data on contextual factors that influenced participant learning capabilities and reflexivity to enable social change and the emergence of organisational learning and sustainability. The second section presents findings on assumptions, values and possibilities for achieving a sustainable future for the NMK. In the third section I provide data that support a simultaneous *critique* of the Museum in Change Programme and the envisioning of new possibilities for social change at the NMK. I end the chapter by offering evidence of social learning processes from the first cycle of inquiry of the research.

7.2   Identifying contextual issues with the participants

This section provides data on the contextual factors that pre-existed at the NMK to influence organisation learning and sustainability. The first aim of this study sought to identify and act on contextual issues related to organisational learning and sustainability (see Section 1.3.1). The contextual issues identified at the NMK are in the form of structural and cultural factors that influenced the participants' learning capabilities for social change. These factors are discussed in Chapter 9 as structural and cultural conditioning at the NMK (see Section 9.2.1). In other words, the factors provided the NMK employees with reasons to either pursue social change or maintain the status quo in the context of organisational learning and sustainability. In the first sections I interpret the findings using Lukes's (2005) conceptual analysis of power relations. The second section

utilises Archer's (1995) morphogenetic theoretical framework to interpret the data further. In this way, I aim to provide a deeper understanding of the social reality that pre-existed at the NMK at the start of the research.

7.2.1 Social and political analysis

A critical analysis of the NMK for the purpose of enabling social change and the emergence of sustainability assumed a form of social and political analysis of the organisation. This is based on the assertion, by critical environmental educators such as Fien and Trainer (1993), Huckle (1993, 1996) and Sterling (1993) that social change in the context of sustainability cannot be accomplished without transforming social systems and processes. Analysing the NMK as a social system took place during the first cycle of inquiry (W1, FG1 and FG2) as described earlier in Chapter 6 (see Section 6.3.3). In my facilitation role during Workshop 1, I engaged the participants in a group activity that explored how various dimensions of power operated at the NMK (see VeneKlasen & Miller, 2002; see Box 7.1)

Box 7.1 W1 group exercise on critical analysis of the NMK

In your small groups respond to the following questions:

- What is the present social situation at the NMK?
- What has to change?
- How large is the difference between the desired and the present social situation?
- What are some examples of visible and invisible power mechanisms that you have seen in your work? Share some examples of power that have worked against your efforts, as well as examples of positive power that have strengthened your work at the NMK.
- What are some potential responses or strategies to either counter the negative impact of these uses of power, or to build on and catalyse the positive power?

Source: Extracted from W1, 21/04/05
Adapted from VeneKlasen and Miller (2002)

Some of the questions in Box 7.1 are framed within Lukes's (2005) conceptual framework for analysing power. The participants discussed the questions in three groups led by A2, A4 and A8 who shared the findings of their groups in the W1 plenary session. In what follows, comments are attributed at various relevant points to the specific group leaders and other participants. The general feedback during the plenary session noted that the social situation

that pre-existed at the NMK was characterised by poor information sharing, poor environmental health and safety, weak legal framework, inefficiency and negligence amongst employees, lack of team work, poor collective identity, fragmented departments and lack of motivation and support from the top management (A2, A4 and A8; see also Chapter 8). Generally, the participants felt that the difference between the desired and the social situation that pre-existed was very extensive. A2 even quantified this gap as '75 percent', to emphasise that many of the issues that the group identified were more about constraints than enablements to organisational learning and sustainability. However, as discussed later in Chapter 8 this gap has since decreased following the implementation of the Museum in Change Programme and communicative interactions as change interventions. The participants identified and discussed various mechanisms of power (visible, hidden and invisible) that impacted on their work (see Table 7.1).

Table 7.1   Dimensions of power at the NMK

Dimensions of Power	Examples	Positive and negative impacts
Visible Power: making and enforcing the NMK rules	Legal framework and mandate	Previous one was restrictive, legal reforms undertaken to generate a new one.
	Scheme of Service	Used to recruit and negotiate terms of service; poorly motivated staff.
	Management structures	Various departments and positions exist; decisions made affect employees.
	Policies	Guide operations at the organisation; many are ineffective and unimplemented.
Hidden Power: setting the agenda (Unwritten rules and practices)	Board of Directors influences	Influences decision making at the NMK; no clearly identified role for the Board.
	Committees and task forces	Findings from committees not made public; set clear terms of reference.
	Collaborative linkages	Fosters research partnerships.
	Donor dependency syndrome	Inhibits the capability to generate revenue and run projects independently.
Invisible Power: shaping meaning, values and what is normal	Bureaucracy and information secrecy	Slows information flows and decision making processes; creates resistance.
	Ethnicity and patronage	Influences employment and social grouping at the NMK.
	Gender issues	Influences recruitment and promotions.
	History of the NMK	Shapes public perception of the NMK.

Source: Start-up workshop (W1) data, 12/04/05

Table 7.1 summarises the examples of power mechanisms and their impacts on enabling organisational learning and sustainability that were identified at W1 (as expressed during the plenary session). It shows three mechanisms through which power operated at the NMK, as identified by the participants: visible, hidden and invisible (see VeneKlasen and Miller, 2002; Lukes, 2005; see also Section 5.2.2). Visible power manifested itself through rules such as the 'requirement to sign the attendance register everyday' (A16). According to A2, observing 'working hours' through ritualistic signing of an attendance register can be a constraint rather than an enablement to achieving high productivity. She commented that observing working hours may constrain one to leave the workplace early 'to seek information from a cybercafé' or another organisation. Furthermore, the rule pays little attention to an employee's work output since this is not included in the attendance register. The following remarks made by the NMK Director General (C1) to the participants during Workshop 2 (W2) support this assertion:

> You may have been in the office from 8 to 5 and achieved zero; you may have been in the office from 12 to 2; just 2 hours and achieved much more than the person who was there from 8 to 5. A lot of us got very, very much annoyed and mad at people coming late to work or leaving early or not being present. Right now what we are asking is: are you able to explain your presence? It is not just good enough to come to work. But are you able to justify through results what you have done during that duration of time?
> (Excerpts from W2 transcript, 08/03/06)

The above remarks by C1 allude to the introduction of performance contracts at the NMK, as a response to the Kenya Civil Service Reform Programme and the Museum in Change Programme (see Sections 2.2.2, 2.3.2 and 8. 4.3).

Dimensions of visible power are also evident in the new *National Museums and Heritage Act* (Government of Kenya, 2006) that defines the mandate and functions of the NMK (see Sections 2.3.1 and 8.6). The new Act was seen as harmonising the previous legal mandate which was restrictive (A4). The NMK management structures and policies provide other examples of visible power that operated at the NMK (A2, A4 and A8). On the other hand, hidden power mechanisms such as 'influences from the donors and the Board of Directors' (A4) provide examples of how unwritten rules and practices set the change agenda at the organisation. For example, through the NMK Support Programme the EU provided funds

for the revitalisation of the Nairobi Museum (C8; see also Section 2.3.2). As explained later in Section 7.4.2, the EU exerted its power by 'trying to redirect, shift the goal posts from one condition to another' during the implementation of the NMK Support Programme (A6). The reluctance by the top NMK management to 'share findings from committees' (A12) was another form of hidden power that influenced information flows at the organisation (see Section 8.2.1).

Invisible power mechanisms such as the role of 'ethnicity and patronage' in employment and promotion (A1) shaped meaning, values and what employees thought was normal (see Section 8.4.1). Ethnic groupings and welfares influenced socialisation at the NMK (A2, A4 and A8). According to A6, chief executives employ ethnicity as a 'positional survival strategy' to protect their positions of power and affiliations. Most participants agreed that employees are likely to support a chief executive from their ethnic group oblivious of the underlying power mechanisms (A1, A4, A6 and A12). This mirrors Kenyan patronage and the ethnically-based political system, where politicians and elites exploit ethnicity for their own interests (see Section 2.2.2). Invisible power mechanisms at the NMK resemble the Gramscian notion of hegemony that was highlighted in Chapter 5 (see Section 5.2.2). Cases of hegemonic influences were evident in the capabilities of some dominant people at the NMK to exert or maintain their positions through a combination of overt and subtle power mechanisms such as ethnicity, religion or gender (A1, A6).

The three mechanisms of power, as highlighted above, echo Lukes's (2005) three dimensional framework on power analysis discussed in Chapter 5 (see Section 5.2.2). Although interpreting W1 data using this framework provides useful insights into power relations, I find it limiting in its understanding of power as a *power over* relationship. All the three dimensions of power in Table 7.1 have a strong focus on the oppressive workings of power at the NMK. Furthermore, they do not exhaust all possibilities of seeking and explaining change processes in the context of sustainability. It is against this backdrop that I also interpret W1 data morphogenetically.

7.2.2 Morphogenetic analysis

Following Archerian social realism (see Section 1.4.1) this research views power as a quality growing from within oneself and not something that is limited by others. I therefore

further interpret W1 data using a theoretical lens from the Archerian morphogenetic approach (see Section 3.3). This locates organisational learning and sustainability within morphogenetic relationships at the NMK. It provides a deeper understanding of the structural and cultural factors that pre-existed at the organisation to *condition* agential learning capabilities to address sustainability issues. Table 7.2 makes an analytical distinction between components of the NMK as a social system and their interactions with employees (see Sections 3.2.4 and 3.2.5). The first column needs to be read as components of structural and cultural domains of the NMK. The second column indicates participant interactions with these components.

Table 7.2   Structural and cultural conditioning at the NMK

Structural and cultural factors	Social and socio-cultural interactions at the NMK
Mandate on heritage conservation and management	Provides identity, pride and roles of actors; knowledge created is disseminated to address issues such as poverty.
Corporate image (logo)	Due to historical factors the current logo represents the work of only one department and is thus exclusive. Perception of the NMK as a repository of fossils is widespread amongst the general public.
Legislative framework	Previous legal mandate was restrictive; the new 2006 Heritage Act is comprehensive and clearly defines the role of the NMK.
Board of Directors	Influences promotion and employment of top managers; oversees functions of the organisation.
Directors Executive Committee	Makes decisions that determine roles and positions of actors at organisation; however, middle managers feel marginalised in decision making processes.
Performance contracts	Encourages joint planning and output-based performance; likely to improve staff productivity.
Established staff positions and roles (Scheme of service)	Provides opportunity to recruit highly trained scientists and senior staff; previous structure had too many layers of reporting.
Established departments	Some departments are well resourced due to historical factors. Initially many and disjointed; but have been reorganised and with creation of new directorates and reduction of departments.
Task forces and committees	Findings from task forces and committees are not quickly shared and implemented. This creates feelings of despondency amongst actors.
Poor remuneration	Causes low staff morale and loss of highly trained staff to other organisations.
Existing policies (e.g. staff training	Although many policies are in place, their powers largely remain unexercised. Policies determine decision making-processes, distribution

and development)	of resources and provide regulations.
Bureaucracy	Slows pace of distribution of resources, information sharing and implementation of key decisions.
Communication channels (Information secrecy)	Information flow and sharing very poor; concealing of information due to secrecy marginalises employees in resource distribution and participation in decision making process.
Museum Welfare Association (MUWA)	Provides forum for interactions and dialogue on staff social welfare; promotes interpersonal relationships and venue for venting employee frustrations.
Ethnic welfare groups	Members assisted to meet basic needs; fosters interactions on the basis of affiliation. However, such interactions can create animosity, mistrust and ethnic divisions at the organisation.
Public Officers Ethics Act	There is an anti-corruption committee at the organisation that documents corrupt practices within staff.
Museum in Change Programme	Aims to implement radical reforms towards improving efficiency and productivity. The programme has however, created fear and anxiety in employees due to the threat of job loss.
Ethnicity and patronage	Contributes to employment and promotion on the basis of ethnicity and family relations. This creates patronage, passivity and low productivity in staff.
Collaborative partnerships	Poor relationships with some collaborators exist. However, the organisation maintains collaborative links with relevant national and international bodies.
Donor funding and colonial legacy	Creates donor dependency syndrome at the organisation; this limits possibilities of running and funding own projects.
Poverty	Creates passivity and employees do not challenge decisions by their superiors for fear of losing jobs.
HIV/AIDS	Loss of employees through deaths; awareness programmes well developed to address the issue.

Source: W1, FG1 and FG3 data

The social and socio-cultural interactions as shown in Table 7.2 are both enabling and constraining in regard to enabling social change processes and the emergence of organisational learning and sustainability. This distinction, which entails a form of *analytical dualism*, opens up many possibilities of engaging with all factors that enable or constrain social change processes as reported in Chapter 8.

Enabling and constraining structural factors

Contextual factors such as Museum Welfare Association (MUWA), established staff positions, the Board of Directors and the Museum in Change Programme are anchored in

the structural domain of the NMK (see Table 7.2). Their emergent powers provide employees with reasons to either pursue change or maintain the status quo in the context of environmental education and sustainability. For example, the existence of Museum Welfare Association provides a forum for deliberating issues such as 'poor pay packages and other related social inequalities' (A8). The Museum in Change Programme, as a contextual factor, was found to both enable and constrain participant capabilities to address sustainability issues. The Programme 'created fear and anxiety within the staff' as many associated the Programme with job losses (A4). To make matters worse, there was little information flow on the Programme as confirmed by the following comments from A4:

> We feel that [restructuring] is a sword hanging over our necks. We do not know what is happening, we are being told that we are going to restructure, we will cut down the number of staff.
> (W1, 12/04/05)

Due to the widespread fear of restructuring at the NMK, it was difficult to institutionalise components of the Museum in Change Programme in museum activities (see Section 8.7). In the words of C8, 'the general community of the NMK is treating [the Programme] like a dinosaur, a monster out to sack us'. This implies that the Programme assumed powers that created fear and anxiety in the employees in the organisation. The failure by senior managers to tell employees what 'we are going to restructure' (A4) illustrates the powers of actors in an organisation to use their positions to conceal information (see Section 8.2.2). The situation contributed to employee resistance to the Museum in Change (C8) and demonstrates the capabilities of agents to use their reflexive powers to maintain the status quo in an organisation. Chapter 8 presents further examples on how structural factors in Table 7.2 provided the participants with both constraints and possibilities for social change in the context of organisational learning and sustainability.

Enabling and constraining cultural factors

Contextual factors such as the role of the NMK in heritage conservation, institutional identity, donor dependency, ethnicity and gender and information secrecy are fixed in the cultural domain (see Table 7.2). As emergent cultural properties of the NMK, the factors provided employees with reasons to either pursue change or maintain the status quo in the context of sustainability. For example, scientific knowledge generated on heritage conservation contributes to the 'conservation of biodiversity in the country' (A8; see also Section 8.6). The knowledge is used to address social issues such as poverty within local communities as explained earlier in Chapter 2 (see Section 2.3.3). At the same time, poverty as a cultural factor created 'passivity within employees' to undermine democratic deliberations in the organisation (A1). Due to high levels of poverty in the country (see Section 2.2.3) some employees avoided challenging decisions for fear of losing their jobs (A2, A6). HIV/AIDS is another example of a cultural factor that constrains the NMK organisational learning capacity for social change in the context of environmental education and sustainability (see Section 2.2.3).

Although the history of the NMK provides employees with reasons to pursue change, it is also constraining in its colonial legacies as evident in governance systems that pre-existed at the organisation (see Section 8.3.1). A top-down leadership that prevailed in the organisation has its origins in the colonial legacy, which constrained employees' learning capabilities for change. A12 corroborates this assertion when he says

> Historically the NMK has been run from the top to bottom reflecting a one-way information flow. Being a colonial relic, the culture and traditions as they were are still in place notwithstanding the name change from Corydon to the NMK. (FG3, 15/09/05)

As implied by A12 colonial legacies in the form of historical factors manifest as cultural emergent properties with powers to determine the NMK identity and governance systems. To end this section, I categorise the factors displayed in Tables 7.1 and 7.2 into five broad areas as contextually mediated issues related to (W1, FG1 and FG2):

1. Poor internal communication and information flows (A1, A4 and A12; see Section 8.2).

2. Decision making and leadership in regard to forms of governance for enabling organisational learning and sustainability (A1, A4, A3 and A6; see Section 8.3).

3. Staff motivation and development in enhancing organisational learning capacity for social change and the emergence of sustainability (A5, A8; see Section 8.4).

4. Financial management towards reducing dependency on international donors and the Government (A12; A18; see Section 8.5).

5. Identity and the role of the NMK in fostering a sustainable Kenyan society (A4, A8; see Section 8.6).

Chapter 8 offers findings on the social and socio-cultural interactions following environmental education processes (communicative interactions) to address, with the participants, the issues within the above five categories. In the next section I present findings on the reconstruction, by the participants, of possibilities for achieving sustainability at the NMK following envisioning exercises.

7.3   Exploring assumptions, values and possibilities for sustainability

Exploring and surfacing participant assumptions and values on sustainability was a form of *cultural analysis* (McLaren 2003) that generated insights into fostering a sustainable NMK. Envisioning, also known as *futures thinking* has the potential of transforming the way actors relate to the future and act today in the context of enabling organisational learning and sustainability (Tilbury & Cooke, 2005). Basic assumptions have been described by Brookfield (1990) and Schein (2004) as the unconscious, taken-for-granted beliefs, perceptions, thoughts and feelings that are the ultimate source of values and action. Applying Bourdieu's notion of *habitus* (1977), basic assumptions can be regarded as long-lasting and exchangeable values and dispositions gained from a community's cultural history (see also Webb *et al*., 2002). Following Archer (1985) I view basic assumptions as ideational elements of cultural factors in an organisation (see Section 3.2.5 and 9.3). In what follows, I present data on participant assumptions and values on what a sustainable future NMK. I first share the participants' visions that exemplify reconstructions of

possibilities of enabling organisational learning and sustainability at the NMK. I then provide a synthesis of the participants' visions and their interpretations on the meaning of sustainability within the NMK context.

7.3.1 Envisioning a sustainable future NMK

I explored and surfaced participant assumptions and values on sustainability through critical questioning of identified contextual issues and envisioning exercises (W1). During W1 the participants were engaged in imagining a sustainable future for NMK (see Section 6.3.3). I used the group activities shown in Box 7.2 to assist the participants to envision a sustainable future NMK.

Box 7.2   W1 envisioning workshop group exercise on a sustainable NMK

Take time and clear your mind by letting all the thoughts and worries of your week drift away. Envision … what a sustainable NMK would look like to you in the next five or ten years. On the sheet of paper provided, draw your vision … think of five key words that you associate your vision with. Write a sentence to describe this vision.

Take time to reflect on your vision … Compare your vision with your neighbour's and discuss why your visions are different. In groups of 3, share your visions and discuss values, influences, opportunities and pathways to achieve the desired future NMK.

- What has influenced and informed your vision?
- What elements would need to be present to create this vision?
- What implications does this vision have for what NMK does now?
- How does your neighbour's vision differ from yours, and how might the two visions interact?

Source: Extracted from W1, 21/04/05
Adapted from Tilbury and Wortman (2004, p. 16)

I share examples of the personal visions of participants on a sustainable NMK. The examples illustrate the reflexive and creative powers of the participants in envisioning possibilities for organisational learning and sustainability (see Section 2.4.3). Within a metaphorical language A7 envisioned the future NMK as 'a tree with drying branches and germinating seedlings around it'. According to A7 the tree symbolises the NMK as a growing institution with less dependence on donor funding as the drying branches. Germinating seedlings symbolised high productivity as a result of good interactions between employees and clients. For A8 a sustainable NMK is a 'dynamic institution that is

sensitive to the needs of its employees first, and then those of the country'. Here, A8 gives priority to the issue of staff motivation and development that was of major concern to the entire group (see Section 8.4). A8 wants the capacity of the NMK to address wider socio-ecological sustainability[54] issues such as poverty and loss of biodiversity strengthened. In support of democratic deliberations at the organisation, A4 envisioned the future NMK as 'a centre for dialogue and interaction, a place where one would come and want to come again'. Using a pictorial representation, A19 envisioned the NMK as a warehouse with people interacting. He wanted the NMK to be 'an institution standing out in the society; a place where the society has confidence in entrusting their heritage to'. Related to the vision by A19 is that of A12 who was passionate about making meaningful changes at the organisation, envision a sustainable future for NMK as a

> Distinct institution professionally managed which would represent my *identity* as a Kenyan both in its architecture and exhibitions and in all its forms. Its entrance should represent the African culture of [warmth] found in an African home; and should be easily *accessible* to the majority of the citizens of this country. NMK should also work with other national and international professional institutions through networking and museum professional bodies.
> (W1, 21/04/05; emphasis mine)

A12 associated this vision with *national identity, pride, accessibility, memorability and profitability*. In this vision, A12 highlighted the issue of identity to imply both personal identity and collective identity (see Section 8.6). This vision responds to some of the contextual issues identified in Tables 7.1 and 7.2. As a participant in this research, I also created a personal vision in which I imagined the NMK to be an institution where information flows freely, and actors worked more closely to generate more revenue for proper functioning (see Section 8.2 on communication). I expressed this vision diagrammatically using an information flow diagram and pictures of happy employees. I associated the vision with *good communication, increased revenue, improved interpersonal interactions* and *increased visitors*. I identified values of equity, efficient use of resources and good leadership as necessary for achieving the vision.

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[54] Sustainability is used in different ways in this study to encompass economic, social, ecological and political processes at the NMK (see Section 4.3.1).

A17 created the most comprehensive personal vision in terms of key elements, pathways, values and opportunities for achieving a sustainable future NMK. He envisioned a sustainable future NMK as an organisation that addresses Kenyan heritage in the 'context of the past, present and future to generate relevant knowledge and revenue for its upkeep and continuity'. A17 supported this vision with nine critical interacting elements that may be regarded as pillars for achieving sustainability at the NMK. These elements are competent, highly motivated and competitively appointed top management team, a committed and competitively constituted Board of Directors, highly qualified and motivated staff, dynamic and responsive public programmes, cutting edge research, improved and steady revenue generation, an improved legal mandate, improved and adequate facilities and a supportive and responsive general public. In Chapter 8, I clarify these elements further when exploring possibilities for social change and the emergence of organisational learning and sustainability at the NMK.

During the W1 envisioning exercise, I made it clear that we were not creating alternative visions with a view to replacing the one that already existed at the organisation. I had learned that a vision statement for the NMK had recently been developed as part of the Museum in Change Programme. A4 shared the vision which was 'To be a repository of knowledge and centre of excellence in heritage management and research for the benefit of humanity' (see Section 2.3.1; see also NMK, 2005). Interestingly, this statement had not been communicated to the employees at the time of W1. The vision was generated within a strategic choice perspective in which only a few people from the organisation were involved (see Section 3.2.1 on this perspective).

Drawing on these participant visions, I synthesise the following as assumptions, values and possibilities for enabling the emergence of organisational learning and sustainability at the NMK:

• An organisation with good information flows, increased interpersonal relationships, well motivated staff, good governance and financial stability (A17; see Sections 8.2, 8.3, 8.4 and 8.5)

- An organisational with a pleasant work environment characterised by improved pay packages, improved services to the public and increased revenue (A8, A17; see Section 8.4)

- A unique, accessible, quality-oriented and dynamic world-class centre in heritage conservation and environmental education (A4, A8, A12; A17; see Section 8.6)

- A responsive education and research centre that addresses sustainability issues towards achieving a sustainable Kenyan society through collaborative links with others (A8; A12; see Sections 2.3.3 and 8.6)

- A distinct and professionally managed organisation that represents the *identity* of Kenya both in its architecture and exhibitions (A12; see Section 8.6)

Chapter 8 provides further findings to support the above assumptions, values and possibilities for the emergence of organisational learning and sustainability. Data from document reviews of the 2005-2009 NMK Strategic Plan and the 2006 NMK Service Charter support the above values and pathways for fostering sustainability at the organisation (see Section 5.4.8). According to the Charter, the NMK undertakes to cultivate and adhere to the following values (see also NMK, 2005 for Strategic Plan):

> Espouse the virtues of truth, integrity, honesty, tolerance, professionalism and teamwork. Ensure openness and transparency in all its dealing and operations. Be a leader in setting the national agenda in respect of cultural and natural heritage. Be creative, innovative and adaptive to change. Respect and protect the environment. (Document review data, Service Charter NMK 2006, p. 3)

Other than the values of the respect and protection of the environment through heritage conservation, most of the espoused values were in fact not widely practised throughout the organisation (see Chapter 8). This confirms that most of the values-in-use at the NMK contradicted the espoused values which the organisation announced to the world (see Argyris & Schön, 1978). Such contradictions, which resulted from the structural and cultural factors identified earlier, prevented social change processes and the emergence of organisational learning and sustainability.

The synthesis outlined above provides a basis for interpreting the meaning of sustainability in the context of the NMK as discussed in the next section.

7.3.2 *Interpretations of sustainability in context*

Since the concept of sustainability is open to multiple interpretations (see Section 4.3.1), it was vital to deliberate what it meant in the NMK context. Envisioning, also known us *futures thinking* (Tilbury & Wortman, 2004) enabled us to engage in a shared interpretation of the meaning of sustainability. As stated earlier in Chapter 6, I engaged the research group in deliberating the meaning of sustainability as a concept during FG2 (see Section 6.3.3 for guiding questions). The participants also deliberated the concept during W1, FG3 and FG5. The following transcript extracts from the three research events confirm this. During W1 A12 interpreted sustainability in this way

> The Museum should be able to generate some money to keep it running because if you want to sustain a project you need to make some profit. Not necessarily in the form of a business but … [the NMK] should be in a position whereby it has the capacity to market itself or have products that can generate income to sustain its programmes.
> (W1, 21/04/05)

This interpretation by A12 reflects the economic dimensions of sustainability and supports some of the personal visions shared in the previous section (e.g., A7, A17). The participants also interpreted sustainability to mean collaboration between organisations. The following extracts from an FG3 dialogue confirm this:

> Sustainability can mean collaboration so that you can achieve your goal. You may not be having all the resources that you need to achieve your goal, but by collaborating with a certain institution you can easily now do what you wanted to do. (A9)
>
> How can you ensure that you sustain that collaboration? (A4)
>
> By being true to yourself. [There] are situations whereby a collaborating institution comes to the NMK, but due to the bureaucratic systems we have; we kind of frustrate them and they leave. (A9)
>
> So you have to be true to yourself? (A4)
>
> Be true to yourself, be true to your systems and your values. (A9)

> Sustainability should be long term collaboration …whereby once you have a project it should sustain itself. (A15)
> (FG3 data, 15/09/05)

In the extracts, A9 views sustainability in terms of collaboration and 'being true to your systems and values'. He cites bureaucracy as a constraint to establishing collaborative links for sustainability. A15 seems to support this interpretation of sustainability as collaboration. A1 had a different interpretation of sustainability from those of A9 and A15. According to A1:

> Sustainability is a word that has been developed by the major donor agencies; the World Bank and the IMF. And when you look the world over all the projects that have been supported by these two organisations none of them has ever taken root … If actually your projects are successful then you become self sustaining; they fail. So they have to sustain poverty and breakdowns for them to continue lending to us. (FG5 data, 13/10/05)

This interpretation by A1 highlights hegemonic influences associated with donor funding in the fight against poverty (see Section 2.2.3). Although A1 is incorrect regarding the origin of sustainability as a concept (see Section 4.3.1), his remarks echo critiques of the impact of development aid initiatives (e.g. Sachs, 1999). Development aid initiatives have continued to marginalise the poor and increased debt status in recipient countries (see Section 2.2.3). C14, a lecturer at Kenyatta University, who attended FG5 as a critical friend, told the participants that sustainability is a difficult and abstract concept to define (see also Section 4.3.1). For C14 it is better for one to start by considering what is unsustainable 'before you go to sustainability, you need to ask yourself: What do you want to sustain, and to what levels?' In an FG2 dialogue, the participants had earlier said that they wanted to sustain the research collections and public exhibitions, linkages with other relevant institutions and the organisational identity. The comments by C14 support Wals and Van der Leij's (2007, p. 17) assertion that "it appears easier to identify what is *unsustainable* … than to identify what is to be sustainable".

Drawing on these interpretations of A9, A12 and 15, and the personal visions shared during W1 (see previous section) I present the following as participant interpretations of the meaning of sustainability in the context of the NMK:

- *Improved internal communication and working conditions for the employees* (A17)
  Most of the participants associated sustainability with a work environment that fosters high productivity stemming from well motivated and renumerated staff. This reflects social dimensions of sustainability that I present in Chapter 8 on issues related to communication and staff motivation (see Sections 8.2 and 8.4).

- *Improved dialogue and staff interactions at the organisation* (A4)
  This entails practising democratic values at the NMK (see Section 4.4.1). Improving governance and leadership as examined in Chapter 8 (see Section 8.3) focuses on political dimensions of sustainability where issues related to resource distribution and participation in decision-making processes are addressed.

- *Being true to your values and systems* (A9)
  The participants shared values of equity, teamwork, truth, honesty, tolerance, being innovative, professionalism, dynamism, courtesy and transparency, as being central to sustainability (A2, A8, A3 and A17). The NMK espouses these values in its Service Charter and Strategic Plan (see NMK, 2005).

- *Improved and steady revenue generation with less dependency on donor funding*
  The participants associated sustainability with less dependency on donor and government funding (A12 and A17; see Section 8.5).

- *Sustained heritage conservation and management for the benefit of Kenyans* (A17)
  This is the core function of the NMK and deals with sustainability issues that arise from all dimensions of the Kenyan environment (see Sections 2.3.3 and 8.6).

- *Establishing collaborative links with other organisations* (A9)
  To foster a sustainable Kenyan society, the NMK is expected to collaborate with other organisations at both national and international levels (W1).

These interpretations affirm that the NMK is a configuration of the various dimensions of sustainability that I examined in Chapter 4 (see Section 4.3.1) and the interacting dimensions of the environment as advanced in Chapter 2. They also confirm that there is no one definition of sustainability, but many interpretations that emphasise the importance of social learning processes in a community of practice (see Sections 4.3.4). In this research

sustainability is explored as an ongoing social learning process that seeks structural and cultural change and the development of agential learning capabilities and reflexivity in a community of practice.

To position the contextual issues identified at the NMK within the broader Kenyan context, the next section provides data on the Museum in Change Programme that was a response to the Kenyan Government's Civil Service Reform Programme (see Section 2.2.2).

7.4   Inquiring into the Museum in Change Programme

In this section of the chapter, I draw on relevant data from the research to provide insights into the Museum in Change Programme (FG6, FG9; see also Section 6.4.2). As stated in Chapter 6, I designed the research to inquire into this programme with a view of generating context specific understanding on organisational learning and sustainability (see Section 6.2.3). The Programme was being implemented at the NMK as a response to changes within the broader Kenyan Civil Service Reform Programme (Government of Kenya, 2003; see also Section 2.2.2). The Museum in Change Programme comprised four components: revamping of public programmes, revitalisation and expansion of the Nairobi Museum, review of the legislative framework and reorganisation of the management structure. In the next sections, I first examine participant views on the notion of Museum in Change. I then explore power relations within the programme. Finally I draw lessons from the implementation of the Museum in Change Programme with a view to informing further social change processes at the NMK (see Section 10.4.1).

7.4.1 Participant views on Museum in Change

This section shares participant views on the notion of *museum in change*. Although the concept was in use at the NMK prior to the commencement of this study, its meaning differed amongst the employees included in the research group (FG9). The Museum in Change Programme components on the revamping of public programmes and the expansion of the Nairobi Museum were financed by the EU under the auspices of the Poverty Reduction Strategy Programme (see Section 2.2.3) and the NMK Support Programme. Some participants such as A1 lacked a clear understanding of what the NMK

Support Programme entailed. The following exchange between A1 and A15 during FG3 deliberations supports this assertion:

> I would like to ask our colleague here first (*points to A10*); I think he is in this 'thing' they call [NMKSP]. You are these fellows who are supposed to turn on the Museum and rationalise … and come up with new structures and put them in place. (A1)
>
> Actually there are many people who do not know what NMKSP means. (A15) (FG3 transcript, 15/09/05)

In this exchange A1 wanted A10, the acting Director of Regional Museums, Sites and Monuments at that time, to share more details on NMK Support Programme. It was against this background of realising the limits of participant knowledge that I invited C8 to participate in FG6 and share his views on the NMK Support Programme, as reported earlier in Chapter 6 (see Section 6.4.2). C8, a long serving employee of the NMK had been seconded to the project as the Public Programme Team Coordinator. According to C8, the NMK Support Programme was conceived to 'contribute to the realisation of our mission'. C8 outlined the various activities within the public programme component where he was involved as the team coordinator. He shared some of the challenges in realising organisational changes as envisaged in the Museum in Change Programme. For example, 'absolute power in decision making process by the committee charged with implementing the NMK Support Programme' (C8) generated resistance to social change amongst the NMK employees. C8 further pointed out that stringent conditions from the EU (donor), frequent changes in leadership of the NMK and lack of shared vision affected the onset and implementation of the Museum in Change Programme. These challenges were manifestations of structural and cultural *conditioning* at the NMK in terms of the organisational learning capacity to address sustainability issues, as reported in the earlier sections and clarified further in Chapter 8.

Deliberations during FG9 surfaced different perspectives and assumptions on the notion of the *museum on change*. Surfacing and challenging participant assumptions with a view to exploring critical alternatives, is a key dimension of this research (see Section 1.3.1). For participants like A14, Museum in Change refers to 'moving from the old to the new'. A14 was alluding to the renovation and revitalisation of the Nairobi Museum that involved

transforming the old style museum to a modern one with more interactive exhibitions. This narrow perspective from A14 that prevailed more widely at the organisation only captures one component of the Museum in Change Programme. However, as A1 noted 'much as we are changing the physical aspects of the Nairobi Museum we need to change the assumptions of employees also'. Participants such as A1, A3 and A14 associated the notion of *museum in change* with a top-down and donor driven project. A12, who was critical of donor funding, had this to say: 'Museum in Change is just a slogan, everything focuses on foreign ideas'. This view was supported by A12 and A16. A16 thought that Museum in Change was 'a mere slogan for realising donor funded renovations at the Nairobi Museum'. This perception is linked to the NMK Support Programme that was being funded by the EU. For A6, the NMK Support Programme was a white elephant 'because it is not participatory in many aspects; lacks integrated approach; is fragmented and compartmentalised; and places more emphasis on one area'.

However, A19 and A4 understood the concept of museum in change more broadly to encompass all the changes that were taking place at the NMK. A19 viewed Museum in Change as a concept covering drastic changes that included a 'review of the organisational structure involving changes in directors and right sizing'. A4 revealed that he had coined the concept with a colleague from the NMK Public Relations department as a catch-phrase to capture all the changes that were intended at the organisation, as introduced earlier and explained in Chapter 2 (see Section 2.3.2). The NMK Director General (C1) reaffirmed this perspective when he shared his vision on the Museum in Change Programme with the participants during W2 (see Section 6.4.2). C1 gave a background to organisational changes at the NMK (see Section 2.3.2) and contrary to the views of some participants (e.g. 12 and 16), he said that the Museum in Change Programme was 'essentially a process that was thought out and done by the staff members and management' after many technical and consultative meetings (e.g. Hunting Technical Services, 1999; Deloitte & Touche, 2001). But as reported later, due to information secrecy findings from such meetings were not easily made public to NMK employees (see Section 8.2).

Following the above four perspectives on Museum in Change can be discerned:

- *Infrastructural developments aimed at revitalising the Nairobi Museum* (A1, A14)

  In this perspective, physical (visible) changes are given priority at the expense of cultural changes that are central to the emergence of organisational learning and sustainability after Archer (1995).

- *A top-down and donor-driven project involving the top NMK management and the EU* (A3, A6, A12)

  This perspective reflects aspects of strategic choice theory explained in Chapter 3 (see Section 3.2.1).

- *A marketing slogan to steer changes at the Nairobi Museum* (A12).

  This is a marketing perspective that does not take into consideration structural and cultural factors in an organisation.

- *A holistic and systemic approach to organisational changes at the NMK* (A4, A19, C1)

  This perspective is synergistic with the critical action research methodology that underpins the study (see Section 5.3.1).

Although these different perspectives indicate the diversity of the research group, they also signify the lack of a common ground and shared vision on what the NMK was transforming into. Engaging the participants in envisioning a sustainable future for the NMK aimed to address this limitation. Creating a collective vision of social change and the emergence of sustainability enables actors to move change processes forward as positively as possible. Furthermore, building a shared vision on social change processes within a community of practice is a key component in fostering a "sustaining organisation" (Dunphy *et al.*, 2003, p. 62; see Section 9.5).

To end this section, and further position the varied views into their broader context, I share some data from W2 to indicate the orientation the Museum in Change Programme followed in terms of organisational change (see Section 3.2.1). During W2, C1 – the NMK Director General – gave background information on the historical context of the Museum in Change Programme (see Section 2.3.2). He also shared his vision on the Programme. C1 cites 'competition from other related heritage conservation bodies and government pressure for

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results oriented management' as key *drivers* of organisational changes at the NMK (see Sections 2.2.2 and 2.3.2; see Box 7.3).

Box 7.3   Views of C1 on drivers of change at the NMK

Competition from other related heritage conservation bodies and government pressure for results oriented management are the key causes of change at the NMK. The period from independence to the 21st Century has been marked by a shift in attitudes in the way of managing organisations and change in Kenya. In the 1960s, change ideas were based on monopoly with less competition within government organisations. At that time, Kenya had few trained professionals who occupied government ministries. In the 1960s and 70s, anybody who knew about museums was likely to be working at the NMK. This situation has now changed with many highly trained people with skills and knowledge on heritage conservation now working outside the NMK. As a result, the NMK is facing competition from related heritage conservation and research entities such as community museums; ecotourism and cultural tourism centres; and related research consultancies. *Change must come and there is no going back if the NMK has to survive in the competitive market.*

… And over the years since we came from the 1990s, it has been the intention of the government policies to focus more on results rather than routine work. And even as early as the 1990s the government had already developed policies towards creating results in state corporations and in government's ministries as opposed to routine processes. What do we mean by this? The idea is: in the past it was good enough to come to the place where you work at 8 0'clock in the morning and leave at 5 as long as you handled whatever things that came your way for that day. You go back home at 5 o'clock happy and that happens up to December when you take your annual leave. At the end of the day, as long as you came to work and you were there and you were performing something; that was good enough. Right now what we are saying is that are you are now expected to explain in very tangible terms whether what you did between 8 and 5 has actually produced some results for the organisation.

Source: Extract from W2 transcript, 08/03/06; [emphasis mine]

Box 7.3 contains extracts from the remarks C1 made during W2 and illustrate the political, social and economic challenges that the NMK faced in a rapidly changing Kenyan environment (see Chapter 2). According to C1, the Museum in Change Programme was conceived to enable the NMK to address these challenges. Through the Programme, the NMK sought to 'concentrate and work on our core functions as a government institution' (C1) and it was seen as restoring order. C1 exemplifies this position when he says:

> As donors kept putting money into specific areas of focus, we realised that we were also shifting and moving around as a result of the donor driven projects. So it was in the 1980s that as NMK management sat down and said, really we need to sit back and forget about all these major expansions, forget about all these number of staff

> that we have recruited, all the programmes that we have put in place and come up with what were we set up to do.
> (W2 transcript, 08/03/06)

This quotation confirms that the Museum in Change Programme was conceived by the NMK management, contrary to the views of some participants (e.g. A2, A16). Our dialogue with C1 during W2 changed the views of A2 on the notion of *museum in change*. Her change in perspective, as reflected in the comments below provides an example of the catalytic validity of the research (see Section 5.5.2).

> Initially, I used to think that Museum in Change was entirely donor funded and driven. However, [C1] made it clear that indeed it was the institution that saw the need for change in light with the changes that were going on around us. … We needed to adjust to fit the dynamic world.
> (W2 evaluation, 08/03/06)

In terms of orientations to change, the remarks by C1 (see Box 7.3) support a managerial perspective in which change is seen as "restoring order" in an organisation (Janse van Rensburg, 1995; see Section 2.4.3). The following observations by A1 support further the views of C1 within this orientation.

> The management of the NMK has to be repackaged because right now we are living in the shadow of our past glory …Today we are not hearing of new find …We have neglected our core business. It was to go out and bring collections, and do research and in the process translate the findings into education programmes.
> (FG3, 15/09/05)

The emphasis by C1 that '[c]hange must come and there is no going back if the NMK has to survive in the competitive market' echoes a strategic choice perspective to social change (see Box 7.3; see Section 3.2.1). This perspective grants the actor autonomy in a change process by dissolving structural constraints. A *strategic choice theory* is based on the premise that those with the power to make decisions interact among themselves and with external parties (e.g. EU) in making change *choices* at the NMK (Child 1997). This statement explains participant views that the Museum in Change Programme was a top-down and donor-driven project that excluded the less powerful employees (A1, A3, A6 and A14). In this research such approaches to change are investigated, with a view to providing

a broader perspective of the change process (see Section 3.2.1). In the next section, I provide further insights into the Museum in Change Programme by exploring power relations that pre-existed within the project.

7.4.2 Power relations within the Museum in Change Programme

The theoretical vantage points put forward to guide this study, recognises that the nature of power relations in any organisation is basic in any social change process. Power relations can provoke anything from ritualistic acceptance to outright rejection of the change programme initiated (Archer, 1985; see Section 3.2.5). This research project is oriented to exploring an epistemological critique of the ways in which power is embedded and reinforced at the NMK (see Sections 5.2.2 and 7.2.1; see Box 7.4).

Box 7.4   Power relations within the Museum in Change Programme

Researcher: *What can you say to be the actions in which the NMK shows its power?*

A1: Well, to what I see, NMK as an administrative wing, eh, exerts power over appointing people to certain committees and sub-committees within the NMK Support Programme. That is where I see its power; making the decision who is supposed to represent certain interest groups.

A6: I think that one will bring in the idea that …., normally the DG is the overall project manager and that is why he has that power … by the virtue of his office.

Researcher: *On the other hand, which actions represent that the donor has some power?*

A6: Actually looking at the period for example, this project has taken from the proposal to the implementation; it has been too long. This is because of the donor's power trying to redirect, shift the goal posts from one condition to another.

A7: Again even some of the powers are not within the NMK itself. For example like the Bill, the NMK could only draft but the other bit, the decision rested in the hands of other key players.

A1: As much as the NMK drafted the Bill with technical input from legal firms, some of us do not know about it; the wordings of the Bill, what it covers.

A7: I think it was circulated…. But still, the issue here is; just like we are talking of the constitution today, the language is in the legal jargon, most people will read and it doesn't come out clearly.

Source: Extract from FG7 transcript, 10/11/05)

Box 7.4 illustrates how I investigated power relationships within the Museum in Change Programme following a critical orientation to this study (see Section 1.4.3). This was aimed to identify constraints and enablements to organisational learning and sustainability at the NMK (see Section 7.2). Data from FG7 deliberations suggest that power relations within the Museum in Change Programme operated at three main levels: the organisation, the Government of Kenya and the donor community (see also Section 8.3.1). The dialogue with A1, A6 and A7 as shown in Box 7.4 exemplifies that power relations within the Museum in Change Programme need to be understood within boundaries beyond the NMK. As stated by A1 and A6, the NMK Director General (C1) in his capacity as the Museum in Change Project Manager had certain powers to oversee the implementation of the programme. However, C1 was answerable to the NMK Board of Directors that had a Chairman whom the participants found to be very keen on the Museum in Change Programme (FG11). Besides the Board of Directors, both the Minister and Permanent Secretary in charge of the Ministry of State for National Heritage wielded power when it came to the implementation of the Programme (C5; see also Section 8.3.1). C1 reconfirmed this when he informed the participants during W2 that no major changes at the NMK could be implemented without written authority from the Permanent Secretary. C1 affirmed this assertion when he told the participants during W2 that 'the absolute decision is not with anybody, it is not with me as the Director General … neither is it with the Board of Directors, because we are all responsible to someone else'. He made this comment with reference to getting Government approval for the implementation of the new management structure that I explained in Chapter 2 (see Section 2.3.2). According to C1,

> It took not less than a year and half for the State Corporation Advisory Committee; for the Inspector General of State Corporations; for the Directorate of personnel management; for the Ministry of Labour; and for the Treasury to approve our new structure'.
> (W2, 08/03/06)

These remarks illustrate how *power relations*, which were socially and historically constituted within Government structures, influenced the emergence of new social relations at the NMK. The power relations manifested as enormous bureaucracy that slowed decision-making processes affecting the implementation of the Museum in Change Programme. It confirms that bureaucratic procedures and practices within the Kenyan

Government constrained social change processes and the emergence of sustainability in organisations such as the NMK (see Section 2.2.2).

In the dialogue in Box 7.4, A7 highlights a further dimension of power relations related to the language used in documents. The 2005 Heritage Bill (see Government of Kenya, 2006) was drafted in legal jargon that was inaccessible to many employees at the NMK. This supports a key notion of critical theory that language is central to the formation of subjectivity and as such actors possess *communicative* competence to bring about mutual understanding and action (see Section 5.2.1). However, this was not the case with the legal jargon used in the Heritage Bill, as it constrained communicative competencies amongst the participants. Within the NMK Support Programme, unequal power relations between the NMK and the EU were apparent in the 'the donor's power of trying to redirect, shift the goal posts from one condition to another' (A6). A12 seemed to express feelings of powerlessness in saying 'we are at the mercy of the powers that be [meaning donors] until such a time that we are in a position to free ourselves from them'. Many participants felt that the NMK Support Programme was externally driven as the project followed 'stringent conditions from the EU' (C8). Such conditions included making all project purchases from Europe. According to A9, the NMK Support Programme gave 'business to many European companies in the form of providing a ready market for their products or supplies'. He however encouraged the participants to look at the benefits the Programme provided for the NMK.

In Chapter 2 (see Section 2.2.2) I explained that conditionalities associated with donor funding manifested in unequal power relations within a project. Lukes (2005; see also Section 5.2.2) understands such relations as oppressive workings of power. As mentioned earlier, the NMK Support Programme was financed by the EU under the auspices of the Poverty Reduction Strategy Programme (PRSP). According to the Head of the Delegation of the European Commission to Kenya,

> [The PRSP] … provides budget support along with technical assistance to help Kenya's efforts in restoring economic growth and reducing poverty. The signature of the Financing Agreement had been conditional upon the achievement of a

> number of pre-conditions, including measures on public finance management and legislation on public procurement.
> (Document review, Extracts from speech made during the laying of foundation stone at the NMK on 01/03/06)

These remarks reconfirm the existence of preconditions associated with donor funding in Kenya. In the case of the NMK, the precondition from the EU was enacting a new legislation on heritage management (see Section 8.6.3). Donor preconditions are precipitated by the political issues associated with poor governance systems in the Kenyan Government, discussed in Chapter 2 (see Section 2.2.2). The preconditions from donors such the EU provide an example of how cultural factors find their way into the structural domain. Archer (1995) terms this the *unification of cultural and structural analysis*. The remarks by the Head of the Delegation of the European Commission show the EU asserting itself in Kenya by introducing power-laden ideas such, as 'restoring economic growth and reducing poverty', which it can exploit in order to further its vested interests. Such ideas created contradictions within the Kenyan Government that necessitated changes in the legislation on public procurement. If the Kenyan Government does not support such changes, a power and cultural struggle with the EU may arise to illustrate how socio-cultural interaction penetrates the structural domain. This was the case during the stop-go cycles in donor lending described in Chapter 2 (see Section 2.2.3).

Data on power relations within the Museum in Change Programme support the notion of critical theory that all knowledge is essentially mediated by power relations, which are socially and historically constituted (see Section 5.2.1). In other words, knowing the reality of organisational learning and sustainability at the NMK is influenced by the "historical context that gives life and meaning" (Darder *et al.*, 2003, p.12) to the experiences of the employees. Based on this critical theory perspective, I have understood power relations within the Museum in Change Programme not only within the NMK organisational context but also within the broader Kenyan context, as discussed in Chapter 2. However, employing an Archerian morphogenetic framework has provided a deeper understanding of the complex ways power operated to both enable and constrain the NMK organisational learning capacity for social change and the emergence of sustainability (see Sections 7.2.2; see also Chapter 8).

The next section shares data on the lessons the participants drew from the inquiry into the Museum in Change Programme as examples of reflections on action aimed at improving further social actions in the context of organisational learning and sustainability.

7.4.3 Drawing lessons from the Programme

Through collaborative research activities in focus groups (e.g. FG6, FG9 and FG12) and workshops (W2 and W4), the participants shared their organisational learning experiences from the Museum in Change Programme. This aimed to draw useful lessons to inform further social changes and the emergence of organisational learning and sustainability at the NMK. During FG9 and FG12 I asked the following questions to stimulate and guide deliberations aimed at drawing out useful lessons from the Museum in Change Programme:

- What lessons can be drawn from the Museum in Change Programme towards enabling further organisational changes at the NMK? (FG9).
- What are the key learning points from any social change process that you have been involved in? (FG12).
- What factors do you consider as crucial for any successful organisational change? (FG12).

Participant responses to the above questions in the form of reflexive deliberations and written reflective comments generated key lessons from the Museum in Change Programme on success factors for social change. This deepened further our understanding of enabling organisational learning and sustainability at the NMK. According to A19, much progress would have been realised if the idea of the NMK Support Programme was 'home grown' and implemented without outside interference (FG9). This assertion was also supported by A16 in her W4 evaluative comments when she said: 'For one to succeed, you need to *own* a process and become a team player from the initial stages'. A19 was alluding to the EU conditionalities and bureaucracies discussed in the previous section. Another key lesson from the Museum in Change Programme is that 'cultural change is hard without good and consistent leadership' at all levels of the NMK (A19; FG9). In other words, a visionary leadership is crucial in enabling holistic and systemic organisational changes in the context of organisational learning and sustainability (see Section 8.3.2). Changes in the

NMK Directorship since the inception of the Programme created major gaps in developing a collective vision for social change and sustainability. The Programme has 'spanned three different regimes of Director Generals all of whom had different visions' for the Museum in Change Programme (A1). To address internal gaps occasioned by regime changes A6 suggested developing organisational 'internal mechanisms that can convert challenges into opportunities for future changes' (FG9). Such mechanisms include sound policies to guide the implementation of social changes (A16) and developing the organisational learning capacity of the NMK for social change as sought in this study (A21; see Sections 8.3.3 and 8.7.2).

An inquiry into the Museum in Change Programme has revealed that the NMK employees fear change due to poor information flows in the organisation (FG9; see Sections 8.2.1 and 8.7.2). According to A9, such fear makes 'employees regroup and fight back' with a view to preventing social change and the emergence of organisational learning and sustainability (see Section 3.3.4 on morphogenesis of agency). Another key lesson from the Museum in Change Programme is the need for a proactive Board of Directors 'willing to work for the organisation and not for their selfish interests' (A1; see Section 7.3.1). The participants wanted membership of the Board of Directors to comprise visionary people who understand the mandate of the NMK in heritage management (A1, A4, FG9 and W2). Nevertheless, due to political patronage and influences, powers to appoint members to the Board rested with the Minister of State for National Heritage (C1, W2). The necessity for providing incentives and motivation to enhance social change in the context of organisational learning and sustainability emerged as a key lesson from the Museum in Change Programme. According to A16, providing clearly defined 'incentives is key to motivating employees' for organisational change (FG9; see also Section 8.7.2). Such incentives were identified by the group as putting in writing when being asked to participate in change, monetary rewards, motivational letters and provision of facilities (e.g. computers, internet connection). For this research, I sent participants motivational letters that were sanctioned by the NMK Director General following implementation of every workshop (W1–W4). In W4 the participants pointed out that celebrating, recognising and appreciating social changes as an organisation can foster the institutionalisation of innovations on organisational learning and sustainability (W4; see Section 8.7.2).

Written reflexive comments from FG12 suggest a number of success factors that are fundamental to any social change process in a community of practice. They include willing, decisive and visionary leadership (A1, A5, A6 and A19), effective, timely and clear communication (A1, A5, A15, A16 and A21), team work and trust (A1, A6, A15 and A22), involvement and empowerment of staff in the change process (A5 and A15) and the availability of human and financial resources (A6).

Based on these success factors and lessons drawn from the Museum in Change Programme, as shared in this section, I consider the following as enabling factors for social change processes and the emergence of organisational learning in a community of practice (FG9, FG12 and W4):

- Implementing home grown and internally driven social change programmes which rely less on external funding and influences (A19, A16, FG9, W4; see also Section 8.5.2)

- Cultivating visionary and proactive leadership at all levels for social change (A1, A5, A6 and A19; see Section 8.3).

- Putting in place appropriate policies to guide social change processes and the emergence of organisational learning and sustainability (A6, A19, FG9; see Section 8.4).

- Addressing fears of social change and the emergence of organisational learning and sustainability (A9, FG9; see Section 8.7.2).

- Providing incentives and motivation for social change and the emergence of sustainability (A9, A16 see Section 8.4.2 and 8.7.2).

- Ensuring effective and clear forms of communication for social change (A1, A5, A15, A16 and A21; see Section 8.2).

- Involving and empowering all actors in the social change process (A5 and A15; see Section 8.3.2).

These factors are discussed further in Chapter 8 as possibilities for enabling social change (morphogenetic) processes and the emergence of organisational learning and sustainability

at the NMK. In the next section I offer evidence of social learning processes in the context
of organisational learning and sustainability.

7.5   Evidence of social learning processes

To end this chapter I offer evidence of social change (morphogenetic) processes and the
emergence of organisational learning and sustainability following the critical organisational
analysis of the NMK (see Section 7.2) and inquiry into the Museum in Change Programme
with the participants (see Section 7.4). In Chapter 4 I stated that the research explored both
organisational learning and sustainability as social learning processes of change and
development in a community of practice (see Section 4.2.2). The study applies social
learning theory to consider both morphogenetic relationships and communicative
interactions in a community of practice (see Chapter 4.2.2). The data presented in the
previous sections of the chapter support the central thesis of the study that I stated in
Chapter 1 (see Section 1.1). To reiterate, the central thesis is that exploring *morphogenetic*
relationships through *communicative interactions* within *communities of practice* can
deepen context specific understanding of organisational learning and sustainability. First, I
provide evidence that supports the generation of new ideas and values as morphogenetic
processes. I then offer data on the emergence of organisational learning and sustainability
amongst the participants.

7.5.1   Generation of new ideas, values and identities

This section provides evidence of innovation for organisational learning and sustainability
at the NMK. It draws on data from the first cycle of inquiry (W1, FG1, FG3 and FG14) to
illuminate the "generation, acceptance, and implementation of new ideas, processes,
products or services" (Kanter, 1983, p. 21) at the NMK as innovation (see Sections 4.4.1
and 9.4.1). Hellström (2004) believes that social action is at the heart of innovation. He
views innovation as "ideating a concept or a mental object, a desired goal, and then
physically acting to create and disseminate a product … into a unit of adoption" (*ibid*., p.
632). I consider innovation for organisational learning and sustainability as any new social
relations or ideas that are generated, accepted and implemented in a community of practice
to improve agential learning capabilities for addressing emerging contextual issues.

Engaging the participants in the critical organisational analysis of the NMK, as reported in Section 7.2, provided opportunities for *ideating* new desired goals, as the first step in innovation. For example, during W1 the participants suggested a number of desired goals towards the emergence of sustainability. They included developing guidelines for volunteers, introduction of open staff forums with top managers, undertaking regular staff surveys, holding open days for the general public and promoting efficient use of resources (W1). Some of these suggestions (e.g. open staff forums) were accepted and taken up for implementation at the NMK (see Section 8.2.3). This claim is substantiated by the following extracts from an e-mail message that I received from A4, Head of Public Relations Department and Team Leader of the research group:

> I … talked with [the Director General] about staff forums, he has asked me to come up with at least a- 6 month staff communication strategy … I am positive we are gradually and steadily heading the right direction.
> (E-mail communication from A4, 11/07/06)

Exploring and surfacing participant assumptions and values on sustainability during W1, as reported in Section 7.3, generated new identities for the NMK. These identities were a reconstruction of possibilities for a sustainable future NMK. One such new identity was found in the personal vision of A12 that espoused the NMK as a distinct and professionally managed organisation that represented the identity of Kenya (W1, see Section 7.3.1 for other visions). Some of the new values that the participants generated during the W1 envisioning activity for implementation at the organisation included equity, memorability, efficiency, professionalism, national identity among others. A Service Charter that emerged at the organisation in 2006 outlines the espoused values that the NMK announces to the world (see NMK , 2006b; see also Section 7.3.1). In the FG14 deliberations I engaged the participants in identifying innovations for sustainability at the NMK. I posed this question to the participants – *What innovations for sustainability are emerging at the NMK?* (FG12).

Drawing on his Master of Business Administration knowledge, A9 (Marketing Officer) informed the participants that 'You can be creative but not innovative. In terms of innovation we [the NMK] can score negative. We have great ideas, but unless we move to implementation innovation cannot take place' (FG12). A12 supported A9 when he said that

we are 'very good at putting forward new ideas but, implementing them is hard'. However, A6 shared the innovation on water harvesting that was implemented at the NMK by A7 through collaboration between the Nairobi Botanic Garden and the Kenya Rainwater Harvesting Association. A6 reported that rain water harvesting programmes have been implemented in regional museums (e.g. Kariandusi) with a view to providing water to the surrounding communities. A6, who is also the chairman of the Environmental Health and Safety (EHS) committee, said that the committee had established a rodent and pest control team (see NMK, 2004 for some of the activities of EHS).

In the next section I provide evidence of the emergence of organisational learning and sustainability amongst the participants based on the reflexive deliberations during FG6

7.5.2   Development of participant learning capabilities

Communicative interactions, as reported in this chapter, developed the participant learning capabilities and reflexivity for addressing sustainability issues. For instance, our dialogue with C8 during FG6 yielded a deeper understanding of the Museum in Change Programme amongst the participants (see Section 7.4.1). This claim is supported by critical reflections from the participants on what they learned in FG6 deliberations. A3 learned that 'communication impediment is still a problem even for higher level management and donor level'. A2 had 'an opportunity to learn in a nutshell what the NMK Support Programme is all about'. A17 learned about the 'changes expected at the NMK in terms of new structures and buildings, challenges for the NMK restructuring, why changes are necessary at the NMK and how the NMK staff can support changes related to the NMKSP'. A6 found the dialogue with C8 'excellent and informative' but A12 thought that, although C8 was articulate in his presentation on the NMK Support Programme, he 'fell short of criticising the way things are done at the Support Programme office'. A17 supported A12 when he reflected that C8 was 'not candid about serious issues such as staff motivation and remuneration' and was unable to answer sensitive questions. These participant reflections reveal that through a combination of action, research and participation, the study developed participant learning capabilities for addressing sustainability issues (see Section 5.3.1). This reflection by A19 captures the key concerns of this research.

> I have learned that the project has a lot of external influence; no consultations were done to smoothen the hiccups associated with projects of such magnitude; cultural change and organisational sustainability requires a great deal of communication internally and externally; and the project was not led by a transformational leader. (FG6 reflections, 01/11/05)

This reflection raises issues of dominant power relations, participation in decision making, leadership and communication. I addressed these issues through collaborative inquiry with the participants as attempt to foster sustainability principles at the NMK (see Section 7.4). To avoid exerting dominant power relations that may arise from my research role I established and maintained research relationships which were based on "equality, harmony, acceptance, cooperation and sensitivity" (Stringer, 2007, p.28). As a participant and learner in this research, I also gained insights into the NMK Support Programme after reflecting on FG6 deliberations. The following journal entry substantiates this claim:

> The NMK Support Programme has experienced lots of bureaucracies and power tensions; the organisation does not seem to be in control of the Project. Furthermore, lack of communication has distorted the activities of the project and many employees have linked it with restructuring. Perception of the project and the expectations of what it entails are not clear to most staff. (Journal, 02/11/05)

This journal entry illustrates an engagement in *reflection on reflection* that incorporates the learning process of the core action research cycle project (see Section 6.2.3). In this particular entry, I was reflecting on participant reflections on what they learned about the NMK Support Programme during FG6.

7.6   Summary

This chapter has presented findings on contextual issues related to organisational learning and sustainability. Identification of the contextual issues with the participants took a form of critical analysis of the NMK as a social system. The participants named various contextual factors that enabled and constrained social change and the emergence of organisational learning and sustainability. I have categorised these factors in five broad themes as contextually mediated and interacting issues of: internal communication and information flow, decision making and leadership, staff motivation and development,

financial management and identity and role of the NMK. The chapter has explored assumptions, values and possibilities for enabling the emergence of sustainability. It has provided the visions of participants on a sustainable future for the NMK that also form the basis for a shared interpretation of the meaning of sustainability at the NMK. A critical inquiry into the Museum in Change Programme with the participants has revealed the existence of diverse views on the notion of the *museum in change*. I have explored power relations that existed within the Programme at the levels of the organisation, Government and donor (EU). Key lessons learnt from the Museum in Change Programme have been illuminated with a view to informing social change processes in a similar context. Finally, this chapter has offered evidence of morphogenetic processes and the emergence of organisational learning and sustainability at the NMK. The evidence supports the generation of new ideas and values to imply innovation for organisational learning and sustainability. It also confirms the development of the participant learning capabilities and reflexivity for addressing sustainability issues.

Chapter 8 presents findings from the second and third cycles of inquiry on deliberations and possibilities for enabling social change processes and the associated emergence of organisational learning and sustainability at the NMK.

Chapter 8 Deliberating and Exploring Possibilities for Change

8.1   Introduction

In this chapter I present findings from the second and third broad cycles of inquiry (see Sections 6.4 and 6.5). The second cycle of inquiry engaged the participants in deliberating and acting upon some of the contextual issues identified in Chapter 7. In the third cycle I delineated morphogenetic processes and the emergence of organisational learning and sustainability at the NMK. I also explored ways of institutionalising those changes at the NMK. Throughout the chapter I provide evidence of social learning processes of change and development to reveal emergent morphogenetic relationships through communicative interactions in a community of practice.

This chapter is organised in six sections with the first five drawing substantially on the second cycle of inquiry, to offer data on deliberations aimed at acting on contextual issues. I report the data within five broad areas of contextual issues: communication and information flows, decision making and leadership, staff motivation and development, financial management and identity and role of the NMK. Due to their interrelatedness, issues within these areas need to be regarded as "an overlapping series of dynamically complex phenomena" (Fullan, 1993, p. 21). The issues encompass interacting dimensions of the environment as presented in Chapter 2. For each area, I clarify structural and cultural factors that conditioned participant learning capabilities and reflexivity to address sustainability issues. I identify basic assumptions and values of participants in relation to these factors and, explore possibilities for social change. The last section of the chapter draws on the third cycle of inquiry to present findings on ways of institutionalising social change processes and the emergence of organisational learning and sustainability at the NMK. First, I present findings on issues of communication and information flows.

8.2   Issues of communication and information flows

According to Doppelt (2003), improving communication and altering information flows in an organisation is a high leverage point for social change in the context of sustainability. In

Chapter 6 I stated that the research group considered improving internal communication as 'very important in our efforts to provide quality services to the various public' (A4). In its 2006 Service Charter, the NMK states its commitment in providing quality services on heritage management and conservation (Document review, NMK Service Charter). Participants such as A1 believed that a focus on improving internal communication would be 'a fore runner towards other cultural change aspects of the NMK' (FG3). The following participant reflexive comments from FG3 further underscore the importance of effective internal communication for social change in the context of sustainability:

- Effective communication 'fosters common goals, vision, direction and commitment' in the context of enabling organisational learning and sustainability (A4).
- In the absence of good communication, 'trust and commitment of the staff is lost' (A11).
- Good communication increases productivity, 'brings about cohesion in management' and enhances collaborative action (A7).
- A two-way communication has the potential to 'reduce hierarchical gaps' and improve harmony (A3).
- Improving internal communication and altering information flows may 'facilitate understanding, commitment and responsiveness by all staff at all levels in the Museum hierarchy' (A11).

These reflexive comments support my motivation to implement communicative interactions within a community of practice as ongoing, open-ended, critical, reflexive and deliberative environmental education processes (see Sections 2.4.3, 3.4.2, 4.4 and 9.4). Participant reflexive comments and written reflections during workshops and focus groups highlighted over time the centrality of communication in enabling social change and the emergence of organisational learning and sustainability.

In the next sections I first provide findings on the structural and cultural factors that enabled or constrained participant learning capabilities to address issues of communication and information flows. I then explore possibilities for improving internal communication through collective social action and innovation. Finally, I provide evidence of

morphogenetic processes and the emergence of organisational learning and sustainability in the NMK community of practice.

8.2.1 Enabling and constraining contextual factors

In Chapter 7 I reported that bureaucracy and information secrecy influenced internal communication and information flows at the NMK (see Section 7.2). This section draws upon FG3, FG4 and FG5 data to deepen further an understanding of contextual factors that enabled and constrained internal communication at the organisation. In FG3 I asked the participants to share their *thoughts*, *feelings* and *actions* on the issue of poor internal communication. This was to elicit basic assumptions and values of the participants on communication and information flow in an organisation. I outline participant thoughts, feelings and actions to indicate these assumptions and values.

Some participants thought that poor internal communication at the NMK was 'a problem of attitude, don't care and sometimes intentional' (A10) that was 'a deeply entrenched problem that needed urgent action for a sustainable NMK' (A2). A11 thought that poor communication 'has destroyed the internal and external image of the NMK' (A11). A10 felt that

> [The] newsletter should be introduced to inform all staff of what is happening at the NMK. It is also important for the staff to be proactive in trying to get information. Monthly briefings by the management should be introduced.
> (FG3, 15/09/05)

Participant actions on communication included sharing information with others (A2, A10), improving communication 'horizontally and vertically' (A19) and voicing opinions even when 'they are too strong for the liking of the management' (A11). These comments illustrate a diversity of views on the issue of poor internal communication amongst the participants (A2, A10, A11 and A19). Participant thoughts, actions and feelings indicate their capabilities to use emergent powers of reflexivity to address issues of communication and information flows.

I summarise the following as reflective of the participant assumptions and values on improving internal communication and information flows at the NMK (FG3):

- Poor internal communication is a deeply entrenched issue at the NMK. (A2)

- A newsletter is a basic tool for improving communication and information flows (A10).

- Improving communication is the responsibility of all employees. (A2, A10)

- Employees should be able to voice their opinions on equal terms without fear. (A11)

These assumptions support the conditions for democratic deliberations that this research aimed to foster during focus groups and workshops (see Section 6.3.3). However, as stated by A2, issues of internal communication and information flows were deeply ingrained in a historical context that resisted social change. This is because, although many channels of internal communication existed, information flow at the NMK was very poor (A1, A15). According to A1, '90 percent of what we call communication in this institution does not exist. Channels are there … but communication does not exist'. A1 went on to define communication as

> Transferring information from one point to another … and getting that information either acted upon and feedback received … Communication is a two-way, rather than from source to end and it just disappears like that.
> (FG3, 15/09/05)

Although most of the participants supported this definition on communication (e.g. A3, A15), A9 wanted us to 'isolate the informal and formal modes of communication'. For A9, most of the communication that pre-existed at the NMK was based on the informal modes that included the *grapevine*. The concept of communication put forward in this research project, reflects a view of communication more broadly, as information exchanges in a community of practice based on democratic principles and respect of all participants (see Sections 3.4.2 and 3.4.3). Nevertheless, as discussed below, a number of structural and cultural factors pre-existed at the NMK to constrain such exchanges.

According to A9, 'there seems to be a bureaucratic system' at the NMK that does not allow easy flow of information (FG3). This system stems from an authoritarian approach to information flow that can be traced back to the colonial history of the organisation (A4, A12). There is a colonial legacy in which certain information is 'regarded as top secret or confidential even when it is not' (A1). In 'authoritarianism' information flow is based on orders and, employees are 'there to be seen and not to be heard' (A12). This has created what A4 calls the 'culture of not being interactive and integrative' (FG3). From a systemic thinking perspective, A7 attributes the *culture* implied by A4 to a lack of the 'we feeling'. For A7, the NMK works from 'part to whole … whatever you are doing is not checked by the external boundary'. A2 supported this view when she observed that 'different departments behave differently' when it comes to communication and information flow. A15 terms this as a 'bad culture of fragmentation where departments operate like little kingdoms'. Sentiments by A2, A4 and A7 echo the instrumental or technical rationality that critical scholars such as Apple (2001), Giroux (2003), Habermas (1984), Kincheloe (2004) and myself consider to be oppressive features of organisational life. In the case of this study the oppressive features are an impediment to the fostering of organisational and socio-ecological sustainability (see Sections 7.2 and 9.2.1).

A number of participants felt that the tendency by the top management to conceal findings from committees hampered information flow (A7, A12 and A15). Concealing findings from committees is a form of 'information secrecy' that had spread through the NMK to constrain communication and information flows (A11). An interview with C5, the Legal Officer, indicated the existence of 'selective communication' where vital information is concealed from employees (I_1). During the interview, C5 cited a classic example of 'selective communication' when she shared with me that:

> The year 2000 the gratuity [for employees on contract] was enhanced from 25 percent to 31 percent, the person concerned received the memo … but decided to keep it in the file. That was never communicated to the staff and they continued receiving 25 percent [up to 2005] to their detriment. That is selective communication.
> (I_1 data, Interview with C5 on 06/12/05)

This provides a typical example of violations of social justice and democracy in an organisation, which were revealed and problematised through the research process in order to offer possibilities for social change (see Section 5.2). On inquiring into the causes of such cases of information secrecy, A14 said that it was due to the 'fear of the unknown' (FG3; see Section 8.7.2). Such fear may be attributed to a lack confidence that A1 associates with 'a sense of insecurity or inferiority'. Some managers fear sharing vital information because employees who know their rights may become difficult to control within a top-down governance system. These remarks by A7 support this assertion: 'Information is power, as employees become more informed they start asking for more and more' of their rights and privileges. According to C5, 'when you keep people so low you are able to control them' (I_1). All cadres of employees were known to conceal information based on the assumption that sharing it with others could expose one to competition for scarce resources or positions (A1, A5).

'Selfishness and lack of communication skills' also contributed to information secrecy (A20). The lack of communication skills stems from 'inappropriate training for a particular job position' that can be traced to the absence of a proper training policy (A7; see also Section 8.4). Moreover, those who conceal information may be doing so out of ignorance of the 'scope of their powers' (A20). In this case, the powers to enhance information flow remain unexercised or unperceived. A6 said that lack of trust 'due to unfulfilled promises' by the management provided reasons for the NMK employees to stop sharing information. Training in communication skills and building trust among employees can therefore be regarded as enabling factors in improving internal communication and altering information flows in the context of organisational learning and sustainability.

Table 8.1 (see also Table 7.2) summarises structural and cultural factors that provide employees with reasons to conceal information and thereby hamper internal communication processes at the NMK.

Table 8.1   Contextual factors that constrain information flows

Structural and cultural factors		Constraining influences on agential interactions at the NMK
Structural	Limited resources (financial and human) for communication (A4)	Lack of consultation and coordination on communication issues. (A4)
	Over-reliance on one-way modes of communication (e.g. memos and circulars) (A1)	Creates a lack of interest in communication; tendency of employees not reading memos or circulars.
	Use of committees/task forces (A12)	Findings usually concealed and the committees are poorly constituted.
	Informal communication channels (A9)	Spreads gossips, rumours and anxiety.
Cultural	Lack of communication policy (A11)	Fragmented communication with departments behaving like 'little kingdoms'. (A15)
	Colonial legacy and authoritarianism (A4, A12)	Creates passivity in employees; information only flows in one direction.
	Information secrecy and official secrets act (A11).	Creates bureaucracy in information flows and lack of trust amongst employees.
	Fear of the unknown (A14)	Actors conceal information out of fear.
	Internal image and identity (A4).	There is lack of 'we feeling' with no sense of ownership and commitment.(A7)

Source: FG3 data, 15/09/05

Table 8.1 illustrates the interactions between structure, culture and agency in regard to internal communication and information flows. The interactions support the notion of *Archerian social realism* that emergent structural and cultural properties in an organisation have powers to confront employees with situations which provide both possibilities and constraints in terms of altering information flows at the NMK (see Sections 1.4.1 and 3.3).

Based on the data presented in this section, I can claim that given its prevalence, *information secrecy* is a basic assumption underlying the NMK as a social entity (A1, A11, see Section 9.3.3). The following analytic memo that I wrote after holding FG3 reconfirms further this assertion:

> The top management at the NMK is infamous for concealing information from the middle and lower cadres of employees. Since information is power, concealing it

gives more power to the perpetuators. I need to explore further into power issues around information secrecy.
(FG3 Analytic memo, 14/10/05)

Through communicative interactions as educational interventions, the dialogue in this research process challenged the basic assumption of information secrecy in order to enable cultural change at the NMK (see Section 9.3.3). During FG4 and FG5 I engaged the participants in exploring possibilities for improving internal communication and information flows, as reported in the next section.

8.2.2 Collective actions on communication improvement

Although participant learning capabilities for social change were conditioned by the contextual factors identified in the previous section, those factors never determined their creative potential to address issues of poor internal communication. This was evident during FG4 deliberations when I asked the participants to explore ways of improving internal communication at the NMK (see Section 6.4.2). The participants suggested the following possibilities for improving internal communication towards enabling social change and the emergence of organisational learning and sustainability (FG4):

- Revitalising the defunct NMK newsletter (A4, A10)
- Encouraging pro-active access to information through existing channels (A1, A15)
- Introducing monthly management briefings for the staff (A4, A10)
- Improving information packaging, e.g. using different colours to highlight different messages in circulars and memos (A16)
- Increasing communication budgetary allocations (A4)
- Training in communication skills (A20)
- Using the Internet to minimise paper wastage (A6, A17)
- Using small interactive and deliberative forums (A4, A6 and A12)

FG4 engaged the participants further in critically reflecting on these possibilities. In groups the participants discussed the importance of each possibility, enabling and constraining factors and opportunities each of the possibilities presented in terms of improving internal

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communication. The groups then reported back for further reflexive deliberations. This strengthened their reflexive capabilities to address issues of communication and information flows in a community of practice. For instance, participants such as A12 found the group discussions 'intense and made one to think deeply about the issues at hand'. A14 found the group work 'very productive'. She hoped that the 'results and suggestions will help make positive change at the NMK'. Table 8.2 summarises some of the results and suggestions from the group discussions and reflexive deliberations.

Table 8.2   Possibilities for improving communication

Possibilities	Opportunities, enablements and constraints
NMK newsletter and Bulletin	• Has the potential to keep employees informed and united. • Previously targeted middle and senior staff. • Does not address sensitive personnel matters; one-way communication; prone to censorship and language barrier.
Regular staff briefings	• Provides face-to-face contact between top management and other employees thereby strengthening staff interactions. • Reduces rumours, misinformation and improves feedback. • Fosters interdepartmental cooperation and increases productivity. • May reinforce top-down communication if not well facilitated.
Use of the Internet	• Economical and minimises use of paper; though initial costs high. • High rate of information flow since computer is a tool for work. • There are ongoing efforts to connect departments on the Internet. • Offers flexibility for external communication. • Constraints include frequent power failures; poor interconnectivity; confidentiality; lack of information technology policy; changing technology; not practical for all employees.
Increase budget for training	• Opportunity for improving training in communication skills and knowledge base. • Constraints include secrecy in resource allocation; lack of strategic action; existence of different financial priorities. • Potential to alter both internal and external information flows.
Use of open, interactive and deliberative forums	• Improves flows of information both vertically and horizontally. • May create more democratic space and confidence in employees. • Fosters collective identity and shared vision for change. • May reduce industrial action from unionised staff. • Enhances self-esteem, confidence and improves productivity. • Brings about innovations, commitment amongst actors. • Presents opportunities for amicable conflict resolution. • Creates different centres of power in top-down governance system. • Risk of insubordination in hierarchical management systems.

Source: FG4 data, 29/09/05

The generation of the above data through group discussions provided avenues for argument, diversity, pluralism, exchange of ideas and meaningful participation. Reflexive comments on what the participants liked best about FG4 reconfirm this assertion (see also Section 5.4.1). A1 liked the 'contributions by more people to the various strategies under review; the reactions from the group; and the stimulation of the thinking process'. A8 reflected that he liked the 'free exchange of ideas in the small groups'. He thought the deliberations were democratic since I 'did not impose anything on the participants'. A2 found the group work 'very good; since people had chances to participate within their groups'. A2 seemed to uphold diversity and pluralism in addressing sustainability issues. She said further that FG4 'enabled people from various fields to interact freely and learn from each other as a means of reflecting on how communication within the NMK can be improved'.

These reflexive comments by A1, A8 and A2 are harmonious with Habermasian theories of communicative action and deliberative democracy that provided epistemological perspectives for the study (see Sections 1.4.2 and 3.4). They also echo features and methodological principles of critical action research that I articulated in Chapter 5 (see Section 5.3.1). As a follow up to FG4, I sought to further engage the participants in another cyclical process of collective planning, collective action and reflecting on social learning outcomes as a basis for more data generation on communication improvement. Engaging the participants in cyclical and collective processes of planning, action and reflection was aimed at developing their learning capabilities for addressing sustainability issues. I therefore held FG5 to involve the participants in further developing action plans on possibilities for improving communication that were within our scope to implement (see Section 6.4.2). We prioritised possibilities on revitalisation of the newsletter, increasing information access, management briefings and use of the Internet for further action. The collective action planning exercise was undertaken in four groups as follows (FG5):

Group 1 (A1, A4, A5 and A14):   developed action plans on the revitalisation of the newsletter

Group 2 (A8, A12 and A16):   developed action plans on how to increase information flow through existing channels

Group 3 (A2, A10 and A19):   developed action plans on how to implement staff briefings by top NMK management

Group 4 (A6, A12 and A17):   developed action plans on how to promote the use of Internet with a view to minimising paper use

The development of these collective actions involved listing actions for implementation, suggesting an ongoing process of evaluation, stating a commitment plan and naming enabling and constraining factors. Each group presented its action plans to the entire research group for further discussions and debate. This dialectic approach deepened participants understanding of how to develop collective actions plans on communication improvement for social change and the emergence of organisational learning and sustainability. The following reflection by A2 confirms this claim.

> Today's meeting [FG5] has looked at the various ways of communicating and how they can be improved/placed into action. I believe that if we successfully tackle these issues, then we shall be a step further in bringing about cultural change at the NMK. What has worked well for me today is to realise that all the four strategies selected to improve communication at the NMK are all achievable; with little effort. (Reflection from FG5, 13/10/05)

This reflection reveals that I involved the participants in processes of identifying ways of improving communication, developing collective action plans, acting on the plans and then reflecting on the findings to improve further collective action. These iterative processes that underpin action research cycles were central to enabling the social change processes and the emergence of organisational learning and sustainability in the NMK community of practice. Table 8.3 outlines action plans developed by Group 3 to illustrate the creative potential and learning capabilities of the participants for addressing sustainability issues in context.

Table 8.3   Collective actions plans on management staff briefings

	Collective Activities
Actions	- Identify the topical issues for deliberation and clarification. - Identify the speakers on the issues put forward (Head of Directorate); the Public Relations Department to identify the speakers and moderate sessions. - Locate appropriate time for the briefings, e.g. 2nd week of every month. - Develop guidelines for the meetings on duration, topics and structure.
Ongoing processes of evaluation	- Use of questionnaires twice a year - Observe changes as a result of improved communication - Hold focus groups and interviews to find out changes - Use newsletter to confirm meetings, topics and dates
Commitment Plan	- Discuss with the Director General (C1) the possibility of having bi-monthly briefings within two weeks (A4 to hold discussion with C1). - Sell the idea to the Directors Executive Committee (DEC) and Board of Directors (C1 to inform the DEC and Board of Directors). - Inform the staff about the bi-monthly briefings through a policy statement sanctioned by C1. - Create awareness of the briefings through the NMK newsletter.
Enabling factors	- Support of the NMK Director General (see Section 8.4.2). - Eagerness of the NMK staff for improved internal communication. - Funding support from the EU through the NMK Support Programme.
Constraining Factors	- Fear of unknown may provide some Directors and members of the staff with reasons to resist the implementation of the briefings. - Logistical problems of holding staff briefings, e.g. language barrier; time intervals; and challenges of bringing employees together on a regular basis. - Limited funding to provide incentives for attending briefings. - Entrenched information secrecy (see Section 8.2.1).

Source: FG5 data, 13/10/06

If well implemented, the action plans in Table 8.3 have the potential to broaden social spaces for democratic deliberations at the NMK (see Section 3.4.3). As explained in Chapter 4, this research explored both organisational learning and sustainability as social learning processes in a community of practice (see Sections 4.2.2 and 4.3.3). The next section provides evidence of morphogenetic/morphostatic processes that arose from the above social interactions.

8.2.3 Evidence of social learning processes

The Public Relations and Marketing Department, of which A4 and A9 were participants in the research, took the responsibility for implementing some of the possibilities for

improving internal communication highlighted in the previous section. As research participants A4 (Head of the Department) and A9 (Marketing Officer) actively participated in the workshops and focus groups (see Appendix 1, p. 396 for details on participation). During FG8 I asked A4 to share the progress made by the Public Relations and Marketing Department in enhancing internal communication. A4 pointed out that the Department had launched an information bulletin, started planning for staff briefings and was working on the revitalisation of the NMK newsletter (see Box 8.1 for details)

Box 8.1   Changing social reality through communication improvement

> The first initiative which we have undertaken is a four-page bulletin called *Museum in change*. This will be more focused on what is going on in terms of construction and the activities … behind the scenes. In the next issue what we plan is to have a page where the staff can air their views, what they think about the museum in change, about the construction and other areas … At the end of it all, maybe after three months we want to sit down and analyse what is the trend of thought among the staff and share this with the top management. Apart from the Museum in Change Bulletin which is going to be every fortnight we also want to start staff briefings. We have sat down with some of the top managers and told them about this idea. What we are coming up with right now are topics which we also want to explore during this period … We are looking at possibly having a number of people from different departments. Let's say on a Tuesday, we will have a series of sessions with different staff members and get their views. It is not as if we are talking down to the staff but it should be a dialogue. At the end of three or four months we want to sit down … go through the issues which we have had with the staff, analyse the trend of thought, share it with the management and see how we can take it a step further. Because we have realised that this is a gradual effort and it is going to take a lot of time to change the culture of the staff or the institutional culture. It is a deliberate effort which we are undertaking … Apart from the Bulletin and the staff briefings; we are still working on the staff newsletter which was supposed to take off last year. But, due to some process which involves the NMK Support Programme we could not do that. The first issue we are planning to have it out by April this year. And this will touch on now the bigger NMK picture (A4).
>
> *Source: FG8 transcript, 09/02/06*

The three initiatives explained by A4, and shown in Box 8.1 illustrate how the action research processes achieved social action-oriented outcomes on organisational learning and sustainability. They confirm the *workability* of the possibilities the participants suggested on communication improvement (see Section 8.2.2). There was the likelihood of increased feelings of ownership and democratic participation, if the participants' suggestions had actually been taken on board. In Box 8.1 A4 supports democratic deliberations at the NMK

when he says: 'It is not as if we are talking down to the staff but it should be a dialogue'. The Public Relations (PR) Department managed to organise and hold one management staff briefing during the data generation phase of this study (FG12). However, despite attempts by A4 and high expectations from all quarters at the organisation (e.g. C1, C5), revitalisation of the defunct NMK newsletter proved difficult.

The frustrations A4 shared with the participants during FG2 may be attributed to the failure to revitalise the newsletter. A4 talked of a 'clash between the PR Department and the top management'. In an ideal situation he envisaged 'an open door policy between the PR Department and top management'. He felt that the PR was not empowered to generate information. Furthermore, PR was the only department that was not represented at the Directors Executive Committee prior to July 2007. In the words of A4 he did 'not know under which Directorate I belong to'. An interview with C12, a Communication Officer at PR, revealed that 'there is nothing to boost one's morale …. One's mistakes are easily noticed but good work is not rewarded' (I_2). In my opinion, these structural factors may have provided the Public Relations and Marketing Department with reasons to maintain the status quo in terms of revitalising the defunct NMK newsletter. This is an example of a morphostatic relationship in which *systemic strains* within the Public Relations Department prevented the re-emergence of the newsletter.

Nonetheless, in the FG8 deliberations A15 observed that 'the Public Relations Department is working; there is a form of communication'. However, in the same session, A19 raised the issue of the NMK website which he claimed was 'in a terrible state'. A9 accepted responsibility for the poor state of the website and promised to work on it. The website has since been revised to be more accessible and thereby information flows out of the organisation have been altered (see http://www.museums.or.ke/). The participants contributed ideas and suggestions that A4 found relevant for the *Museum in Change Bulletin*. The following reflections by A4 corroborate this claim:

> My colleagues have passed important ideas about the Bulletin in terms of contents; expectations of others (research group) on Public Relations Department and communication needs.
> (FG8, 09/02/06)

The expectations from the research group to which A4 alluded seem to have energised the Public Relations and Marketing Department into action. Our reflexive deliberations during focus groups 'opened avenues for discussion' (A7) and made us 'focus on our work to improve success in the NMK operations' (A9). It also confirms that the participants were *critical* of the prevailing social and political order at the NMK. Through democratic deliberations, they challenged one another towards enacting new possibilities for social change. This is consistent with the critical orientation adopted in this research (see Section 5.2.1). Our reflexive deliberations therefore assumed a joint problem solving activity approach (Wagenaar, 2002; see also Section 3.4.3) and developed participant learning capabilities to alter information flows in a community of practice.

Through funding from the EU, under the NMK Support Programme, the NMK started producing an eight-page bulletin on a regular basis. A4 coordinated the efforts in his capacity as the head of the Public Relations Department and a participant in the research. *Museum in Change,* as the Bulletin[55] was called mainly focused on 'the infrastructural development at the Nairobi Museum' (A4). The *Bulletin* provided a useful forum for the employees to express their views on topical issues. For example, the May/June 2006 issue contained the views of four employees on issues of communication and information flows (see NMK, 2006a). C7, the Principal Administrative Officer, who participated in this research, expressed these views in the May/June *Bulletin*:

> There is need for commitment of top management to put up clear communication channels. The communications channels, both written and verbal, must be clear … Frequent meetings at all levels must be encouraged and their outcome followed up and implemented … We should encourage Open Door Policy so that all staff, including the directors can get answers to their queries.
> (Document review, *Museum in Change Bulletin*, May/June 2006, p.5)

These views corroborate some of the findings presented in the previous section on possibilities for improving internal communication and information flows. This confirms the *workability* or *outcome validity* of the findings emerging from the research in regard to improving organisational learning and sustainability practices (see Section 5.5.2).

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[55] The Museum in Change Bulletin was published with the support of the EU under the auspices of the NMK Support Programme. The Bulletin covered developments within the Museum in Change Programme, staff news and views, news around the Museums and forthcoming conferences and training.

In what follows I offer evidence of the emergence of organisational learning amongst the participants as members of a community of practice. Data from participant reflections during FG3, FG4 and FG5 suggest that this research developed their learning capabilities and reflexivity to address issues of internal communication and information flows. Participants such as A12 learned that 'we can resolve any problem if we operate as a team and respect each other'. The reflection by A12 identifies collective action and respect as essential elements in addressing sustainability issues. A2 claimed that she had learned to share her 'ideas freely with the group members'. The participants started appreciating their creative potential for social change at the NMK. For example, A19 says: 'Change comes through individual effort' and A8 asserts that 'given an opportunity, people can initiate change'. In addition, communicative interactions during FG4 enhanced the systemic thinking capabilities of participants such as A2 and A9 as supported by these reflections:

> Since we are all part of the system we should not run away but rather strive to bring about change within the organisation. (A2)
>
> When looking at change … one is not supposed to dwell on personalities, but the systems. (A9)
> (FG4, 29/09/05)

A12 seemed to appreciate the role of democratic deliberations in increasing one's learning capability for addressing sustainability issues when he reflected: 'You can have divergent views on a given [issue], but after sifting through and [deliberating] on it, arrive at a given consensus' (FG4).

Communicative interactions during FG3, FG4 and FG5 developed collective action (A2), systemic thinking (A2, A9), democratic deliberations (A2, A12) and reflexivity (A8, A19) amongst the participants (see Section 9.4 for details). This supports the four dynamics that are associated with the notion of *communicative interactions* as presented in this study (see Sections 1.5.1, 4.4 and 9.4). In the next section, I present findings on governance issues related to decision-making processes and leadership to deepen further an understanding of exploring organisational learning and sustainability in the NMK community of practice.

8.3   Issues related to decision making and leadership

This section explores political dimensions of sustainability by sharing findings on governance issues related to decision-making processes and leadership at the NMK. The term *governance* as used here refers to the way power is distributed at the NMK through its information, decision-making and resource-allocation mechanisms (see Doppelt, 2003; see also Sections 2.2.2 and 4.3.1). Firstly, I draw upon FG8 and FG10 data to surface participant assumptions and values on decision-making processes and leadership at the NMK. The assumptions and values indicate how power operated and was viewed by the participants in regard to enabling organisational learning and sustainability. I share structural and cultural factors that enabled or constrained the participation of employees in decision making processes at the NMK. Secondly, I explore possibilities for democratic forms of leadership and inclusive decision-making processes in the context of environmental education and sustainability. Finally, I provide evidence to support social learning processes in the context of improving governance at the NMK.

8.3.1 Enabling and constraining contextual factors

The first cycle of inquiry associated the top-down governance system that pre-existed at the NMK with issues related to decision making and leadership (W1; see Section 7.2.2). I draw upon findings from the second cycle (FG8, FG10 and W2) to provide a deeper understanding of how issues of governance conditioned participant learning capabilities for social change. During FG8 I asked the participants to deliberate on how decisions were made and implemented at the NMK. FG10 surfaced participant views on leadership. I asked this question to elicit their assumptions (FG10) – *What are your personal views on leadership required for Museum in Change?*

Participant responses to this question and reflexive deliberations during FG8 revealed assumptions and values on decision-making processes and leadership at the NMK. Participant views on leadership supported qualities of good corporate governance as articulated in Chapter 2 (see Section 2.2.2; see also Doppelt, 2003; Fullan, 2005; see Box 8.2).

Box 8.2   Participant assumptions on decision making and leadership

Decision making processes

- The Directors Executive Committee is responsible for making key decisions.(A18)

- There is a need to involve staff at all levels in decision making processes. (A1, A4 and A15)

- It takes courage and proper training to make a decision and stick to it. (A3; A4)

- Decision making is core to organisational change and development. (A5)

- There is much external influence in decisions made at the NMK. (A1, A4)

Source: FG8 data, 09/02/06

Change for sustainability requires leadership that:

- Is visible and practical through word of mouth. (A3, A18)

- Leaves a legacy beyond its tenure. (A3)

- Is charismatic, supportive, focused and visionary. (A5, A15, A19)

- Is dynamic, action-oriented and at times pushy. (A16)

- Can communicate effectively both vertically and horizontally. (A18)

- Inspires others 'to work willingly, enthusiastically and competently'. (A20)

- Espouses transparency and accountability. (C13)

- Delegates and empowers at the same time. (A18)

Source: FG10 data, 22/02/06

Box 8.2 displays participant assumptions and values on decision making and leadership (governance) at the NMK (see also Section 9.3.2). Some of these assumptions and values indicate the possibilities for enabling and constraining organisational learning and sustainability. As shown in Box 8.2, FG8 data confirm that decisions at the NMK were 'made at the top and without consultations with the middle managers' and others cadres of staff (A1). At times the 'decisions are made and not communicated' to the employees (A19; see also Section 8.2.2). According to A9, 'decision making is so centralised and the middle managers are not empowered'. These sentiments were also shared by A4 who claimed that 'sometimes you make a decision and a director feels that you are *undercutting* him/her'.

A4 decried that 'we are poor in making decisions because of a lack of managerial skills'. As a result, 'decision-making processes are not fully understood[56] 'by many at the NMK (A20). A4 implies the relevance of training in human resource management that is essential in improving the capacity for 'one to make firm decisions and stick to them' (see Section 8.4 on staff development). In line with this argument is an observation by A1 that 'we still use a personnel system of managing issues and not a human resource system'. According to A6 the personnel system entailed 'much paper planning' and less consultation in terms of decision-making processes. Even when decisions are made, their implementation at the NMK was very poor (A1, A12). The participants cited a number of reasons that contributed to the poor implementation of decisions at the organisation. A18 observed that 'the problem is no one wants to take responsibility to act after a decision has been made'. This problem is compounded when 'a decision is made and no dateline' for its implementation is indicated (A4). Lack of motivation amongst employees was said to be a major constraint to the implementation of decisions (A20, A5; see Section 8.4.1). Moreover, the absence of a proper 'resource allocation policy and budget' at the NMK constrained the implementation of decisions related to financial matters (A20; see also Section 8.5.1).

External factors such as the legislative framework, the Government and the NMK Board of Directors played a major role in enabling or constraining decision-making processes at the organisation (A4, A17). As an enabling factor, the *National Museums and Heritage Act of 2006* (Government of Kenya, 2006) provides a basis for decision-making processes (see also Section 8.6.1). The Act recognises the NMK as a corporate entity in which is vested the power to manage and conserve Kenyan heritage (*ibid.).* It identifies a Board of Directors as the governing body of the NMK. Government bureaucracy slowed down decision-making processes at the NMK. It posed challenges in enacting holistic and systemic changes within the Museum in Change Programme. This was confirmed during W2 by the NMK Director General (C1) when he told the participants that the existence of 'multiple centres where decisions have to be made' created challenges in implementing the

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[56] To provide insight into decision making, A20 shared with the participants the stages involved in the process. A20 was a Training Officer based in the Human Resource Department. She was undertaking a Master of Business Administration degree at the time of the study. She outlined the stages involved in decision-making processes as: the identification of an issue, identification of decision criteria, allocation of weight criteria, development of alternatives, analysis of the alternatives, selection of the alternatives, implementation of the alternative and evaluation of decision effectiveness (FG10).

Museum in Change Programme holistically (see also Section 7.4.2). He also mentioned the frequent political changes within the Government as a structural constraint to decision making-processes at the NMK. He shared the fact that 'between 2003 and [2006], I have served under five permanent secretaries …we have had three Ministers', and all held different views on the Museum in Change Programme (see Section 7.4.1). The foregoing confirms that external factors provided both possibilities and constraints for social change and the emergence of organisational learning and sustainability at the NMK.

I synthesise the following as contextual factors that pre-existed at the NMK to enable or constrain democratic forms of leadership and decision-making processes (FG8, FG10 and W2):

- Centralised and exclusive decision making processes that typify a top-down governance system (A1, A9)
- Lack of managerial skills in human resource management and decision making (A4, A6 and A20)
- Lack of motivation for making and implementing decisions coupled with the absence of a resource allocation policy and budget (A18, A20)
- External factors such as the legal framework, the Government and Board of Directors (A4, A17)

From the data presented in this section, I can assert that given its dominance, *centralised decision making processes and leadership* pre-existed at the NMK to define its top-down governance system (A1, A9; see also Sections 7.3.1 and 9.3.2). The next section presents data on possibilities for improving decision making and leadership that challenge top-down forms of governance.

8.3.2 Possibilities for democratic forms of governance

Essentially, achieving a sustainable NMK is dependent upon democratic leadership and inclusive decision-making processes which are associated with good corporate governance (Benn & Dunphy, 2007; Doppelt, 2003; Gatamah, 2004). This section draws upon W2 and

FG10 data to explore possibilities for fostering democratic forms of governance at the NMK. FG10 engaged the participants in discussing the following questions in small groups:

- *How can we put leadership and decision making in the hands of the NMK employees?*

- *What are its advantages and challenges?*

- *How can leadership at the NMK be improved to accelerate cultural change and innovation for sustainability?*

A2, A3 and A12 discussed the first two questions and A10, A15, A16 and A18 discussed the final question. Reporting on behalf of the first group, A2 made the following presentation:

> One way of putting decision-making processes in the hand of the NMK employees is by information sharing, that is, it has to be open sharing of information. If you are moving right or left, let all the employees know the direction you are moving to. Secondly, it is important to have open forums where the employees are going to vent their anger on you and all their frustrations … The first of such forums is going to be a very heated argument but you should not despair … with time the anger and frustrations are going to reduce as more and more of the employees' complaints are being addressed. Thirdly, encourage other people's ideas and incorporate them in the good running of the institution. If I give you my ideas please put them as mine and not yours. Because if you give the ideas as yours next time I am not going to give you my ideas because I want to be acknowledged as the person who contributed to those ideas. Finally, avail training opportunities consistently to the employees because this is going to empower them. They become more learned and are going to make informed decisions.
> (FG10 data, 22/02/06)

From these remarks by A2, four possibilities for enabling democratic leadership and inclusive decision making processes can be identified. These are information sharing (see also Section 8.2.2), use of interactive open forums, encouraging innovation and respecting other people's ideas and developing capacity for decision making through training. In her presentation, A2 stated advantages of democratic leadership and inclusive decision-making processes. It provides 'opportunities for quality decision making', increases efficiency, forms a basis for leadership mentoring and even frees 'the top management and allows

them time with their families' (A2). However, it poses challenges in terms of implementation in a system that is accustomed to top down forms of governance. According to A2, 'some people can use interactive forums to undermine' leaders they do not like. Furthermore, if not well managed open forums 'may degenerate into chaos' (A2).

Reporting on behalf of the second group, A16 identified other possibilities for improving leadership as: enhancing 'team work to encourage inclusiveness', empowering the person to whom leadership is delegated, providing 'an enabling environment for leadership' and rotating positions such as heads of departments (FG10). In FG10 deliberations the participants generated further possibilities for improving leadership and decision making. For example, A12 recommended the development of 'a comprehensive operational manual' to guide employees in decision making processes at the organisation. He also suggested the establishment of 'an office of expatiator' to ensure that decisions are implemented. The suggestions by A12 confirm the creative role of the participants and their capacity for innovation in the context of organisational learning and of sustainability.

The Museum in Change Programme, through its component of reorganising and streamlining management structures, provided possibilities for improving governance systems at the NMK (see Section 2.3.2). During W2, C1 shared possibilities for improving governance systems at the NMK through the Museum in Change Programme. One such possibility was in the devolution of decision-making processes at the organisation with the aim of empowering heads of departments and curators in regional museums (C1).

Underpinning these possibilities for democratic forms of governance are efforts to transform persons at the NMK into *reflexive* and *deliberative* actors as clarified in the next section, which provides evidence of social learning processes.

8.3.3 Evidence of social learning processes

Following the implementation of the Museum in Change Programme, a radical reorganisation of management structures has occurred as explained in Chapter 2 (see Section 2.3.1). The Programme has decentralised decision-making processes and created new management structures aimed at improving performance and service delivery at the

NMK. According to C1, the regional museums in the country 'have been categorised into three administrative blocks: the central, western and coastal regions' (W2). Assistant Directors who are expected to report to the Director of Regional Museums, Sites and Monuments, have been appointed to run the administrative blocks thereby devolving more power to the regional museums. The following remarks contained in a speech made by the then Minister of State for National Heritage, implies the emergence of new structures at the NMK:

> The implementation of [the Museum in Change Programme] will substantially strengthen the NMK institutional capacities and make them sustainable. The … corporate and management structure and processes of the NMK will be enhanced fundamentally … NMK is committed towards improving performance and service delivery and introducing efficiency in its operations. In line with Government policies and development plans, the NMK has finalised a five-year strategic plan that covers the period 2005-2009.
> (Document review, Extracts from speech by the Minister of State for National Heritage during the launch of the Museum in Change Programme on 01/03/06)

These remarks verify that the Museum in Change Programme was aimed at strengthening the institutional capacities of the NMK for improved performance and efficiency (see Section 2.3.2). This is in alignment with the Civil Service Reform Programme that seeks to create a public sector that is efficient, productive and results oriented (see Section 2.2.2). New corporate and management structures were created at the NMK in the form of new directorates (see Section 2.3.2). The remarks below made by the Chairman of the NMK Board of Directors, vividly captures the emergence of a new directorate on the basis of structural and cultural properties that existed at the NMK:

> We have created a new directorate of corporate development. This directorate will immediately embark on the rebranding of the National Museums of Kenya and the various products we offer the public.
> (Document review, Extracts from speech by the NMK Board Chairman during the launch of the Museum in Change Programme on 01/03/06)

The emergence of a new structure, as stated above is an example of structural morphogenesis as theorised in Chapter 3 (see Section 3.3.2) and discussed in Chapter 9 (see Section 9.2.3). It affirms a key tenet of critical realism that "agency presupposes structure, for without it agents would lack the powers essential to action" (Whittington, 1988, p. 529).

In this case the new directorate was formed before the selection of the relevant director who, upon appointment was expected to embark on a rebranding exercise towards improving the external image of the NMK as a heritage institution (see Section 8.6.2).

I draw upon FG8, FG10 and W2 data to offer evidence of the emergence of organisational learning and sustainability within the research group which operated as a community of practice at the NMK. Reflexive and evaluative comments made by the participants on what they liked best about FG8 interactions reconfirm that focus groups enhanced democratic deliberations (see also Sections 5.4.2 and 8.4.3). A15 commented that 'there was a lot of enthusiasm and contributions from all members'. A16 found fellow participants 'very open' and A4 reflected that there was 'free flow of ideas; honest and candid observations; well thought and articulate arguments'. A18 yearned for similar deliberations at 'interdepartmental meetings and other NMK forums'. In addition, FG8 deliberations deepened an understanding of constraints and possibilities for democratic forms of leadership at the NMK (see Section 8.3.1). As a result of FG8 deliberations A1 saw the necessity of 'structured decision making processes' and the 'empowerment of managers at different levels' as being central to democratic forms of governance. He also learned that 'there is much external influence in decisions made at the NMK'. A18 learned that 'decision making needs to be done by all concerned right from the bottom to the top, i.e. bottom-up approach' (FG8). A18 came to realise that social change cannot be resisted forever when she reflected that 'we need to change before change changes us'. A2 learned that 'decisions made by the top management sometimes don't get to the intended audience'. Reflexive comments by A15 that 'the NMK is very disjointed and departments rarely interact; there is disconnect between the top management and middle level staff' (FG8) confirm her deepened understanding of systemic strains which pre-existed at the organisation. The departments have since been re-organised following the Museum in Change Programme to minimise systemic strains as explained earlier (see also Section 2.3.2) According to Archer (1996), *systemic strains* in a social system create problematic situations for change agents, while complementarities create easy situations (see also Section 9.2.3).

These reflections by A1, A2, A15 and A18 confirm the principle of deliberative theory that, under the right conditions, deliberation may expand perspectives and foster understanding amongst members of a community of practice (see Sections 4.4.2 and 9.4.2). FG10 and W2 generated new ideas and values on leadership for enabling organisational learning and sustainability in a community of practice (see Box 8.2). From the process, A15 learned the 'virtues of a good leader' and A10 gained insights into the 'kind of leadership envisaged at the NMK' (FG10). Dialogue with the top NMK management during W2, enabled the participants to enlarge their perspectives, opinions and understanding on issues of decision making and leadership (see also Section 8.4.3). For A4, the dialogue 'revealed quite a lot' and gave him a better 'understanding of the challenges, vision and focus of the NMK leadership' (W2). Generally, focus groups and workshops provided social spaces which fostered dialogue amongst the participants towards the emergence of organisational learning and sustainability as shared in this section. The next section offers findings on social dimensions of sustainability by exploring issues of staff motivation and development at the NMK.

8.4   Issues of staff motivation and development

According to Doppelt (2003), people are the most important resource of any organisation with regard to achieving organisational learning and sustainability. He identifies an organisation's system of rewards as a key lever for change (*ibid.*). In this research, A9 pointed out that 'an organisation is judged according to its quality of human resource' (FG11). As in many organisations the NMK Human Resource Department is seen to be still rooted in the traditional focus on rules and control that stems from the top-down model of governance prevailing in the organisation (see Section 8.3.2). In this section, I offer findings on issues of staff motivation and development in the context of organisational learning and sustainability. I first examine structural and cultural factors that enabled or constrained staff motivation and development at the NMK. I then explore possibilities for addressing issues of staff motivation and finally present evidence of social change processes and the emergence of organisational learning and sustainability.

8.4.1 Enabling and constraining contextual factors

In Chapter 7 I reported that ethnicity and patronage influenced employment and promotion of employees at the NMK (see Sections 7.2 and 9.3.4; see also NMK, 2003). This section draws upon data from the second cycle of inquiry to provide further insights into the contextual factors that influenced staff motivation and development (FG11, W2, document reviews and interviews). To stimulate deliberations on the contextual factors that enabled and constrained staff motivation and development, I posed this question to the participants in FG11 – *Where are we in terms of staff motivation and development?*

FG11 deliberations revealed that the participants did not know the staff establishment of the NMK (A7, A17 and A20). A20 informed the participants that the organisation had moribund policies on staff motivation and development. Lack of qualified staff in human resource management was cited as the cause for the pre-existence of poor policies on staff development (A9, W2). At the start of this research, the NMK operated with a personnel department in which 'nobody [was] specifically trained in human resource management' (C5; I_2). The implication of this was that issues of staff motivation and development were being handled from an administrative perspective (A9, FG11). The issue of ethnicity and patronage in employment and promotion was a major constraint on staff motivation and development (see also Section 7.2). According to A1, 'about 60 percent of employees came here because of one person or another' (FG11). This argument by A1 was supported by C5, the NMK Legal Officer, during an interview (I_1) when she said: 'People kept asking me whom do you know and who brought you here … [They] didn't seem to believe that you can actually find an advertisement and apply'. C5 was alluding to the role of patronage and ethnicity in securing employment in the organisation. Another constraint to human development was the pre-existence of a high number of staff on prolonged temporary employment on casual and fellowship terms (A1, A20; see Deloitte & Touche, 2001). This created job insecurity and led to 'people doing jobs that they were not qualified for' (C5). The summary below from the report of the NMK personnel streamlining committee that was appointed in 2003 by the Director General (C1) to review issues of staff motivation and development reconfirms the pre-existence of the aforesaid structural and cultural factors:

> [Staff] complaints and views were about prolonged temporary employment (casual and fellowship), recruitment and deployment, training … working conditions, house allowance, health and safety at work, among others. Staff cited allegations of bias, nepotism, lack of transparency, poor or lack of policies on various personnel matters … The genesis of most problems was the failure to observe the rules and regulations … in the Terms and Conditions of Service, and the Scheme of Service, coupled by a lack of proper establishment and organization structure.
> (Document review, report of the NMK personnel streamlining committee 06/06/2003)

A17, a participant in this research and head of the East African Herbarium, chaired the 2003 NMK personnel streamlining committee. The committee claimed that issues of human resource development and management comprised over three quarters of the NMK problems. Staff views and complaints, as shown in the summary above connect with experiences of shame, anger and resentment which are typical of social dynamics of disrespect in organisations such as the NMK (Honneth, 1999; see Section 5.2.4). Social dynamics of disrespect in a community of practice violate social justice and democracy thus constraining the emergence of organisational learning and sustainability. Social dynamics of disrespect at the NMK were noticeable in poor staff motivation as verified by A6 when he remarked during FG11 that there were no 'arrangements in place to enhance motivation either in terms of rewards or in terms of promotion' (FG11). The issue of staff motivation generated heated debate amongst the participants as revealed in the following FG11 dialogue:

> I think motivation is not about money per se; because if we are talking about money, then … nobody would be around here. I think there is some motivation to some extent. Ah! Because I think I am motivated *(A6 laughs)*. I am underpaid yes, but I am motivated; because I can do what I want to do with my skills. A19
> *(A6 interrupts)*
>
> Let me ask my brother a question. I head a department in this Museum. … I don't have a secretary, neither do I have a computer, neither do I have a printer …how am I expected to deliver? And I write a memo …then I am told … due to financial constraints sorry we cannot help. .. To what level am I motivated as a scientist in this Museum? A6
>
> You are worse off!! [PROLONGED LAUGHTER IN THE GROUP] A19
>
> Let [A19] share with us what motivates him. Researcher
>
> Well, my speciality is a bit different from his, because me I need to sit in the office and work. Not necessarily with a computer, because our systems are not yet

> computerised as such. We are still using the manual system and I am good at that. And so I can perform relatively well with the system as it is. A19
> (FG11, 03/03/06)

In this dialogue, A19 puts forward a reasonable point of view when he points out that motivation is not only about money. Both A6 and A19 seem to link motivation to an enabling work environment in terms of facilities and resources. In the case of A6 the lack of facilities and resources (both human and financial) is a major constraint to his capacity to deliver as a research scientist at the NMK. Demotivated and 'demoralised employees' are prone not to implement decisions aimed at enabling change in an organisation (A20). Related to the issue of motivation is the wrong deployment or what A6 calls 'misplacement of human resources'. A20 pointed out that

> There is misuse and underutilisation of human resources through unplanned transfers even of highly professional staff. People are deployed in capacities they do not have adequate skills to run hence making implementation of decisions hard.
> (FG11, 03/03/06)

An example of misuse of human resources through unplanned transfers as stated above is the case of a Communications Officer (C12), who was redeployed as a ticket clerk in October 2005. It took the intervention of the Director General (C1) to revoke the wrong redeployment of C12. During an interview session (I_2), C12 attributed her redeployment to a 'personal vendetta' as some heads of departments use their positions of power to intimidate their juniors. Related to underutilisation of human resources was the lack of a proper orientation programme for new employees (A12, A20 and C5). The following comments by C5 during an interview verify this issue: 'I was taken to a few departments … but I wasn't told anything about how the organisation operates' (I_1). As an emergent cultural property of the NMK, an orientation programme possesses powers to confront new employees with situations that provide both possibilities and constraints in terms of implementation of decisions. However, the programme can adapt new employees into a situation that resists social change and in the process constrain their learning capabilities for addressing sustainability issues in context.

Another issue of staff development identified at the NMK was the massive brain drain due to poor remuneration and working conditions. The remarks below attributed to the Chairman of the NMK Board of Directors and made during the official launch of the Museum in Change Programme substantiate the extensive nature of brain drain as a structural constraint to the emergence of sustainability at the NMK:

> The current salary of the National Museums of Kenya staff, which was last reviewed in 1997, is far below that paid to other National Research Institutions and even below the mainstream civil servants … The net effect of this is the massive brain drain that is currently being experienced at the NMK. In the period between June 2005 and January 2006 we have lost 26 staff members to other institutions both locally and abroad. … Our passionate plea to the Government is to kindly facilitate the implementation of the revised remuneration package in line with the Government policy of harmonization of salaries.
> (Document review, Extracts from speech by the NMK Board Chairman during the launch of the Museum in Change Programme on 01/03/06)

These remarks authenticate the existence of low and inequitable compensation levels for employees within the Kenyan public sector (see Section 2.2.2) which led to the loss of high quality staff at the NMK and even the Government. The passionate plea by the Chairman of the NMK Board of Directors to the Government was favourably received by the President of Kenya as corroborated in this response:

> I am aware of the challenges that the institution has been facing, especially with regard to staff retention. The Government will continue to seek ways of ensuring competitive staff remuneration. This will be achieved through harmonization of the National Museums with equivalent state corporations involved in research and higher education.
> (Document review, Extracts from the Presidential speech during the official launch of the Museum in Change Programme on 01/03/06)

These remarks confirm the support from the Government in addressing issues of staff motivation and development. On this occasion, the President went ahead and utilised powers, bestowed on him by virtue of his office, to declare a salary increment for the NMK staff. The emergence of new salaries at the NMK, following the Presidential directive, illustrates critical realist's *emancipatory* claims that structures are transformable through the intentional exercise of human agency (Archer, 1995; Bhaskar, 1986). It also verifies

that "humans are not necessarily equal in their agency; they have unequal access to the structural resources they need" (Whittington, 1988, p. 529).

The next section shifts focus to exploring possibilities for enhancing staff motivation and development towards morphogenetic processes and, the emergence of organisational learning and sustainability at the NMK.

8.4.2 Possibilities for enhancing staff motivation and development

A motivated and well-developed human resource base is essential for enabling social change and the emergence of organisational learning and sustainability in an organisation. The Museum in Change Programme and communicative interactions provided opportunities for staff motivation and development. This section draws substantially on FG11 and W2 data to affirm the foregoing claim. I used the following two questions to generate participant views on how to enhance staff motivation and development during FG11 and W2:

- How can the NMK staff be motivated and developed to contribute to social change and the emergence of organisational learning and sustainability? (FG11)

- What measures are being put in place to motivate and develop the NMK staff to enable the Museum in Change Programme and the emergence of sustainability? (W2)

Participant responses to the above questions in form of reflexive deliberations (FG11) and group discussions (W2) generated data on the possibilities for motivating the NMK staff for social change in the context of sustainability. The possibilities were improving training, introducing performance contracts, revising schemes of work, developing a recruitment policy and improving staff salaries (FG11, W2). In her capacity as the NMK Training Officer, A20 informed the participants that 'we want to streamline training in the institution, we want to have training which comes from the needs of the department' (FG11). A20 reported that workshops for the top management and heads of department had been carried out to prepare the ground for needs-based training at the NMK. She defined

training[57] as 'basically getting new knowledge, learning new skills and changing attitudes'. The Museum in Change Programme and the Government of Kenya through its Directorate of Personnel Management offered opportunities for staff training at the NMK. A1 pointed out that staff training need not focus on formal courses only but also study tours to other organisations. A12 questioned the value of training at the NMK when he commented that 'we have had so many trainings … we do not see any change at all. We expect change but nothing is seen, things even become worse' (see also Section 8.7.2). The formation of a Human Resource Development Committee (HRDC) and the introduction of a performance contract system at the NMK were aimed at addressing concerns such as those raised by A12 (A20, W2).

Workshops as a research technique (see Section 5.4.2) provided possibilities for enhancing staff motivation and development in the context of organisational learning and sustainability (see Sections 5.4.2 and 8.7.2). Unlike focus groups, workshops in this research involved the top NMK management (corporate agents), as explained in Chapter 5 (see Section 5.4.2). Through workshops this study received a lot of support from C1, judging from his attendance and presentations in all the workshops, save for W1 (see Appendix 2, p. 399 for corporate attendance). C1 motivated the participants by acknowledging their contributions to the Museum in Change Programme and also approving my request for the NMK to meet the W2 and W4 meal expenses. The remarks below made by C1 when opening W2 corroborates this claim:

> I want to mostly sincerely thank Abel Atiti for this wonderful work … In one stroke of the pen he is combining several things. Number one, is that first of all this is his academic part of his work … Second thing is that he is doing something that is of direct relevancy and importance to what we are doing currently at the NMK. In fact it is the core thing that we should have been doing alongside as we carry out the reforms and changes that we are talking about … So we will try as much as possible to support him and support the groups that he has been working with and ensure that we get the highest management attendance in this particular workshop … And in addition to that, I thank all the staff members who have been volunteering. He has

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[57] This research prefers the term *development* to *training* as the later is oriented to success and reflects technical rationality that the study challenges (see Section 3.4.2). Through communicative interactions as environmental education processes, the study sought to develop participant learning capabilities for social change in the context of sustainability.

been calling for meetings and research sessions that I am sure have taken up a lot of your time.
(Extracts from W2 transcript, 08/03/06)

These motivating remarks by C1 resonate with facets of the critical action research design, as described in Chapter 6 (see Section 6.2.3). C1 seems to identify with the two distinct action research projects within this study when he says: 'in one stroke of the pen [I am] combining several things …academic part' of the thesis action research project and 'doing something that is of direct relevancy and importance' to the NMK (the core action research project). He appears to acknowledge, the importance of combining action, research and participation within an organisational change programme (see Section 5.3.1). His support translated into a high attendance by members of the Directors Executive Committee (DEC) in this particular workshop (W2; see also Section 5.4.2).

The next section presents evidence of morphogenetic processes and the emergence of organisational learning and sustainability that resulted from the Museum in Change Programme and communicative interactions on issues of staff motivation and development.

8.4.3 Evidence of social learning processes

Through its development of human resources component, the Museum in Change Programme has contributed to social change processes at the NMK. These changes include the revision of the NMK scheme of service, development of training policy, introduction of performance contracts, development of succession policy, undertaking of skills inventory, review of salaries and the establishment of appropriate staff levels (A20; W2, FG11, FG12). Employees who had stagnated in one job group had been promoted and those who had overstayed as casuals were awarded contracts (A20). A new Director of Administration and Human Resource has been appointed to replace C3 who was redeployed to head the Research Institute of Swahili Studies in Eastern Africa (RISSEA). The changes were part of the right sizing process of the Museum in Change Programme. Right sizing or rationalisation of staff, which C1 (Director General) described as 'ensuring the right job description for the right person' (W2) started at the top to avoid pitfalls witnessed in retrenchment programmes that begin with lower cadre staff. The above-mentioned social changes following the implementation of the Museum in Change Programme were a

response to the Kenya Civil Service Reform Programme (see Section 2.2.2). The changes verify the emergence of new social relations at the NMK on the basis of the structural and cultural factors that pre-existed at the organisation (see Section 1.4.1).

During W2, C1 reconfirmed that the process of staff rationalisation at the NMK commenced in 2001, with the commissioning of the Deloitte and Touche management consultants to review the NMK organisational structure (see Section 2.3.2). The emerging report that proposed an organisational structure based on only "649 qualified staff" was unfavourably received by the organisation (Deloitte & Touche, 2001, p.3). This prompted the NMK management to form an internal organisational review team in 2003 to revise the structure. Drawing upon the Deloitte and Touche (*ibid.*) structure and views from the staff, this team came up with a new structure that specified job descriptions and staff levels. The structure was approved by the NMK Board of Directors in 2003 and by the Government in late 2005. Due to enormous bureaucracy and slow decision-making processes within the Government, it took more that a year and a half to have the new structure approved (see Sections 2.2.2, 7.4.2 and 8.3.1). A consultant was hired in 2006 to undertake the staff rationalisation[58] (C1, A19). This illustrates the lengthy process involved in enabling social change in a public organisation such as the NMK that is influenced by bureaucratic and top-down governance systems.

Communicative interactions on issues of staff motivation and development led to the emergence of organisational learning and sustainability amongst the participants as members of a community of practice. Focus groups (e.g., FG4 and FG9) and workshops (e.g., W2 and W3) created social learning spaces in which the participants raised and addressed issues of staff motivation and development freely without top-down constraints of power (see Sections 5.4.1 and 5.4.2). The participants acknowledged that focus groups provided forums for the 'free exchange of information including arguments and debate' (A3), and 'vibrant and open' discussions (A4). They found dialogue with the senior NMK management during W2 'open and consultative' (C4), 'excellent and open' (A6), 'open,

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[58] Although staff rationalisation at the NMK basically meant ensuring the right job description for the right person, it also had implications of job losses for those employees who did not fit in the new structure. According to C1, the Government declined to approve any staff cuts at the organisation due to the 2007 General Elections (W3).

sincere and honest' (A4), 'very informative and educative' (C10) and very interactive (C5). The reflections below by A12 and A1 on insights gained as a team during W3 substantiate that the research processes created democratic social learning spaces:

> As a team you can dialogue on a given subject matter until you agree amicably without hurting your peers. … People interpret things very differently and use a bit of time to bring into focus a particular point. (A12)
>
> The team is really focused and committed to the research … it is a change mover able to convert and make new comers welcome, free and ready to open up. (A1) (W3 participant reflections, 28/11/06)

These reflections support the importance of upholding pluralism and diversity in a community of practice. They illustrate the emergence of organisational learning and sustainability in the research group. Evaluative comments made in W2 by participants support the importance of internally driven social change processes in a community of practice. According to A3, 'internally driven change has a human face and change is by choice'. These reflective comments by A3 prove Archer's (2003) argument that actors within organisations consciously choose to use their knowledge, skills or reflexive capabilities to enable or constrain social change and the emergence of organisational learning and sustainability. C5, the NMK Legal Officer, also recognised the value of internally driven change when she reflected: 'The NMK has … very resourceful people; change can be a healthy and beneficial process' (W2). For A22, Museum in Change can be achieved internally 'with appreciation and proper incentives' (see Section 8.7.2).

This research provided opportunities for the participants to express their creative and reflexive potential for social change through collective learning. For example, during FG13 I asked the participants the question – *What are your views about your role as an agent of cultural change at the NMK?* A5 stated that his role as 'an agent of change is crucial just like any other staff'. A19 affirmed that he is 'ready to change and will assist the NMK' in undergoing cultural change. A1 said that his 'potential is yet to be tapped and I could do more'. During FG5 deliberations he had expressed there was much he 'could do' through the untapped potential thus

> That is why I said … sometimes you need a revolution. If you put me as acting Director General for a week; the Museum will change. Because I will turn it over the first two days, then turn it back sideways. By the time people settle they will see the change. (A1)
> (FG5, 13/10/05)

These sentiments expressed by A1 support the notion of transformational change that are supported and proposed by critical theorists. Nevertheless, such a change may not be as easily achieved as A1 wants us to believe. This research is revealing that agential capabilities to enable change are conditioned by, but not determined by structural and cultural factors operating within a specific context (see Sections 7.2 and 9.2). Moreover, the process of changing cultural dynamics, which manifest as basic assumptions and values in an organisation, is a lengthy and an ongoing one (see Sections 7.3 and 9.3).

Communicative interactions during workshops generated useful insights into the complex reality of enabling organisational learning and sustainability (see also Section 5.4.2). Evaluative comments by participants in W2 and W3 authenticate this assertion. For example, A12 said that he 'gained insights into the complexities of bringing about change in an institution' (W2). C9 started realising that 'if the NMK intends to address socio-economic problems of local communities, it should be ready to accommodate changes in its institutional frameworks and policies' (W2). Data from W3 confirms that the research process extended participant perspectives on the role of human resource development in social change. For instance, A2 learned that 'human training and development is core in bringing about organisational change'. A key lesson for A5 was that 'human resource development is the engine to service delivery' and needs addressing 'without fear of favour'.

Based on data presented in this section, I synthesis key features of democratic deliberations for social change and the emergence of organisational learning and sustainability in a community of practice as follows (W2, W3, FG11 and FG12; see also Section 3.4.3):

- Free exchanges of information that includes arguments and debate based on respect and collaboration amongst the participants (A3, A12)

- Vibrant, open, sincere, honest, interactive and consultative deliberations amongst members of a community of practice (A4, A6, C4 and C5)

- Commitment to diversity and pluralism when addressing sustainability issues in a community of practice (A12)

- Focus on collective social action for internally driven structural/cultural changes in a community of practice (A3, A14 and A19)

In the next section I present findings from deliberations on issues of financial management with regard to enabling organisational learning and sustainability at the NMK.

8.5   Issues of financial management

According to C1 (Director General), the NMK 'needs to adopt a business *mind* so as to compete effectively with other organisations' yet at the same time remain a non-profit making Government organisation (W2). This implies that although the role of the NMK is not to create financial wealth for the Kenyan Government, it needs to generate a sound revenue base in order to remain relevant in a fast changing corporate world. When envisioning a sustainable future NMK, A17 regarded improved and steady income as one of the pillars for fostering sustainability at the organisation (see Section 7.3.1 for participant visions). In the next sections I present findings on issues of financial management that constitute economic dimensions of sustainability. I first share contextual factors that enabled or constrained financial management to influence social change and the emergence of organisational learning and sustainability. I then present data on possibilities for improving financial viability of the NMK. Finally, I offer evidence of morphogenetic/morphostatic processes and the emergence of organisational learning and sustainability at the NMK.

8.5.1 Enabling and constraining contextual factors

W1 data revealed that over-reliance on donor and Government funding or what A12 termed as 'donor dependency syndrome' constrained the capability of the NMK to generate revenue and run projects independently (see Sections 7.2 and 9.3.5). At the time of this study, sources of revenue at the NMK included Grants from the Government and donor

community, entry fees, sales of artefacts, hire of grounds and donor funding. In FG12 deliberations, A19, the NMK Internal Auditor, informed the participants that the NMK did not operate on a structured budget. However, to realise social change and the emergence of sustainability as sought in this study, the NMK needs to have clearly spelt out budgeting procedures and financial controls in place (W2). A19 shared with the participants that 'we have two levels of budgeting: central budget from the Government and the NMK organisational budget' (FG12). In the former the organisation receives a lump amount from the Treasury to cater for staff salaries and infrastructural development[59]. Ideally, the organisation is expected to have a comprehensive budgeting system that consolidates the two levels. The following journal reflection that is based on an informal conversation with A22 (Programmer) over budgetary issues corroborates the assertion by A19 that the NMK did not operate on a structured budget.

> Financial management is based on the whims of individual managers. Budgeting at the NMK is disjointedly done; heads of departments have no idea on how to prepare departmental budgets; they should be trained in financial management.
> (Journal, 11/11/05)

The issue of poor budgeting at the NMK generated a heated debate during FG12. According to A6, poor budgeting at the organisation has created other issues. The organisation was unable to make long-term projections for its research and training programmes with a view to pro-actively securing Government grants (A6, FG12). A1 cited cases in which project funds 'are not utilised and have to be forwarded to another financial year'. Poor budgeting has also created procurement problems at the NMK (C5, I_2). During the third session of W2; A7, A12, A22 and I, as a group, interacted with C4, the Financial Controller, and discussed this question – *How come the NMK has been operating on an exclusive budgeting system?*

Reporting back in the plenary on behalf of the group, A7 described a budget as the 'allocation of financial resources on various items on where you want to spend your

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[59] In 2006, the Treasury cut its budgetary allocation to the NMK by 15 percent (A19). The revenue generated at the organisation also shrank following the temporary closure of the Nairobi Museum (2005-2007) for renovation and, the political unrest that engulfed the country following the flawed Presidential election in December 2007. A substantial amount of revenue generated at the NMK is dependent on admission fees from visitors who comprise international tourists.

money'. He told W2 participants that budgeting at the NMK was done on a yearly basis. This created a gap in the financial management of long term projects based on an inclusive budgeting system for the NMK. Nevertheless, as an enablement there existed enough human resources, with appropriate financial skills, to address the gap. A7 also reported that delays and a lack of response in sending departmental budgets to C4 meant that only 'consolidated budgets' could be prepared.

In addition to the aforesaid contextual factors, bureaucratic accounting procedures constrained the capabilities of research scientists to implement projects that were aimed at fostering sustainability. In the FG10 deliberations many participants complained about the bureaucratic procedures within the accounts department (e.g. A1, A3, A6, A9 and A12). This sometimes forces research scientists to use other organisations to implement their externally funded projects, thereby making the NMK lose out financially (FG9). Reacting to these complaints, A19 asserted that 'accountants are taught to be structured … and must follow strict procedures'. In this case, accounting procedures exert some *powers* to constrain the implementation of decisions made on financial matters, thereby contributing to morphostatic processes in the context of organisational learning and sustainability.

The dominant basic assumption of the NMK being a *non-profit making organisation* seemed to provide employees with reasons for not purposively venturing into income generating activities to reduce heavy dependency on external funding (W1, see Section 9.3.5). Basic assumptions and values, as ideational components of culture, have emergent powers that may enable or constrain social change and the emergence of sustainability in an organisation (see Section 3.2.5). The belief in not making a profit contributed to what A12 termed a 'beggar mentality in doing almost all the projects in our institution' (FG10). Consistent with a critical orientation to organisational learning and sustainability, this research process set out to challenge the aforesaid basic assumption with a view to exploring possibilities for improving financial viability at the NMK (see also Section 9.3.5). This is the focus of the next section.

8.5.2 Possibilities for improving financial viability

This section presents data that support possibilities for addressing contextual factors related to issues of financial management as explained in the previous section. The personal visions of participants on a sustainable future for the NMK and interpretations of the meaning of sustainability, as shared in Chapter 7 (see Section 7.3), provide possibilities for improving revenue generation at the organisation. For example A7 envisioned the NMK as 'a tree with drying branches and germinating seedlings around it' to imply a growing institution with less dependence on donor funding. A17 envisioned an NMK that is able to generate 'revenue for its upkeep and continuity' in regard to fostering sustainability. This suggests that improved revenue generation was considered as an enablement to fostering sustainability at the NMK. The group that discussed issues of financial management in W2 (A7, A12, A22 and C4; see also previous section) suggested the formation of a budget committee, that would assist heads of departments in budgeting. The group also recommended regular financial feedbacks and updates in the organisation.

As explained in Chapter 6, I invited C13, the then Grants Coordinator of the Kenya Museum Society (KMS), to share with the participants her experiences in fundraising (FG10). C13 suggested to the participants that

> The whole articles of incorporation governing [the NMK] need to be looked at to enable the research scientists to develop commercial products that are branded *National Museums of Kenya*. They can be sold at all the museums and markets in Kenya and the world. The scientists who help do this should be able to share the profits.
> (FG10 deliberations, 22/02/06)

This suggestion was aimed at addressing the cultural constraints associated with the belief in the NMK being a non profit-making organisation. Although the NMK cannot operate independent of the Government, the *National Museums and Heritage Act of 2006* (Government of Kenya, 2006), which established it as a corporate entity, gives it the autonomy to generate income (C5; see also Section 8.6.3). A19 had the following advice for the participants: 'Let us move out from the culture that we are just custodians of heritage' (FG10). The idea of forming an endowment fund operated by an independent trust, which was shaping up at the time of this study provides a possibility of moving away

from the cultural constraints implied by A19 (W3). These remarks made by C1, the NMK
Director General, during W3 confirms this:

> Museums have thrived entirely on endowment funds. We have the necessary
> resources, unique collections, diverse artefacts and products that we can give the
> rest of the world …. We can use these resources to create an endowment fund ... To
> ensure transparency; the endowment fund will be operated by a trust independent
> from the NMK management. (C1)
> (W3 data, 28/11/06)

The implementation of the Museum in Change Programme offered further possibilities for
improving financial viability of the NMK. The following extracts from the speech made by
the Chairman of the NMK Board of Directors during the official launch of the Programme
verify this claim:

> The National Museums of Kenya Support Programme funded by the European
> Union is the cornerstone in our aspirations to become a self-sustaining organisation
> that will rely less and less with time, on financial support from the Treasury.
> (Document review, Extracts for speech by the Chairman of Board of Directors,
> 01/03/06)

These remarks were made with reference to the new governance structures and facilities
that emerged at the NMK. For example, the new Directorate of Corporate Affairs and
Development (see Section 8.3.3) provides an opportunity for improving the financial
capability of the NMK through a rebranding of the organisation and the various products it
offers to the public (see Section 8.6.2). In the next section I offer findings on the
consequences of implementing possibilities for improving financial viability through the
Museum in Change Programme and communicative interactions.

8.5.3 Evidence of social learning processes

As highlighted above, a new Directorate of Corporate Affairs and Development emerged at
the NMK following the implementation of the Museum in Change Programme. The holder
of this Directorate is expected to use her powers to transform some of the structural and
cultural constraints described in Section 8.5.1, with a view to improving the NMK financial
viability. In the previous section, I reported that a group involving C4 (Financial
Controller) in a discussion on financial issues in W2, suggested the formation of a budget

committee. Six months later, A22 reported during FG12 that the initiative never took off. This is an example of how communicative interactions as educational interventions led to a morphostatic or stability process (i.e. no change). In this case, C4 used his powers to reproduce the status quo. Comments made by A1 during FG12 that the 'powers to be are purposively not willing to come up with a structured budget' verifies this.

Communicative interactions on issues of financial management deepened our understanding of the reality of improving the financial viability of the NMK (FG10 and W2). For example, A12 reflected at the end of FG10 session that he had 'gained mostly on the way forward in managing finances'. Although A12 was astonished to know that the NMK 'does not have a [structured] budget to base its needs on', his perspectives on the importance of budgeting widened. In the same vein, A4 found the group discussion on budgeting during W2 'very elucidating'. He reflected that 'budgeting has always been something mythical, but when you start having such forums with larger groups, you start inspiring them and even make them feel that this is not a hard subject'. These reflections by A4 and A12 that are representative of those made in FG10 and W2 and suggest a deepening understanding amongst the participants on issues of financial management.

In the section that follows I present findings on issues of identity and the role of the NMK in fostering a sustainable society.

8.6   Issues of identity and role of the NMK

The NMK has the responsibility of enhancing social, economic and political conditions that foster the development of agents and the well-being of the society (see Section 2.3.3). In Chapter 2 I explained that through its research, conservation and education activities, the NMK generates useful information that is central to fostering a socio-ecologically sustainable Kenya. Social learning theory which informs this study is not simply about developing agential learning capabilities and reflexivity for addressing sustainability issues at the NMK. It also involves a process of understanding who we are and in which communities of practice we belong and are accepted (Handley *et al.,* 2006; Wenger, 1998). This section presents data on the processes through which the NMK comes to recognise

itself, and be recognised by others, as a heritage institution involved in fostering a sustainable society and environment. The concept of identity is a complex issue that requires a more detailed exploration than provided for here. This is because construction of collective identity is an ongoing process that enables members of a community of practice to recognise and define themselves (Munday, 2006). Furthermore identities, norms and ethical frameworks are always under construction and need to be understood as works in progress (Chambers, 2004).

Firstly, I will provide findings on the contextual factors that influenced the recognition of the NMK as a heritage institution with a capability to foster a sustainable society and environment. I will then explore possibilities for enhancing the identity and role of the NMK as a heritage institution. Finally, I will offer evidence of morphogenetic processes and, the emergence of organisational learning and sustainability as a result of the Museum in Change Programme and communicative interactions.

8.6.1 Enabling and constraining contextual factors

A number of structural and cultural factors pre-existed at the NMK to influence the identity and the role of the NMK as a heritage institution with the capacity to foster a sustainable Kenya and environment (see also Section 7.2.2). At the start of this study, the participants reported that the NMK had a poor corporate image with its logo representing the work of only one department (W1). Generally, there was no common direction and shared vision in the role of the NMK in heritage management and conservation. In W1, A4 pointed out that the NMK logo only represented the work of one department (Palaeontology) and some projects did not reflect the core activities of the NMK as a heritage institution (A4, A15; see also Section 7.4.1). The following remarks made by A7 during the W1 plenary discussions capture issues of identity and the role of the NMK:

> During the end of year party, different identities of the NMK are evident … We see a fragmented Museum rather than a cohesive one. There is no sense of belonging. This element has been recurring all the time. Individual ideas are not appreciated and taken up by the institution. Each team plays in its own direction. (W1, 12/04/05)

These remarks by A7 suggest that although the NMK contains multiple identities, it is important for the organisation to provide a 'sense of belonging' to its members (A7). The remarks are reflective of Wenger's (1998) argument that communities of practice are not necessarily defined by spatial closeness of their members or by a uniform interest position (see Section 4.2.2). The sense of belonging to which A7 alludes can be provided for in the NMK mission and mandate outlined in Chapter 2 (see Section 2.3.1).

As enabling factors, the NMK mission and vision statements together with the *National Museums and Heritage Act, 2006* (Government of Kenya, 2006; see Sections 2.3.1 and 9.3.1), define the identity and role of the NMK as a heritage institution, with the capacity to contribute to a sustainable society and environment. Following Wenger (1998), the NMK mission and vision statements and the 2006 Act define the joint heritage activities of the organisation, the mutual engagement that bind the employees together and the shared practices on heritage conservation that the employees develop over time (see also Section 4.2.2). The remarks made during the official launch of the Museum in Change Programme by the then Minister of State for National Heritage substantiates further this assertion:

> Valuing, recognising and protecting our heritage is important for us as a people, for our heritage reinforces and reminds us who we are as a people; where we have come from, what we've done to make us Kenyans, what it is that we value about our country … Research work on cultural heritage has provided information necessary for national development. Studies on indigenous knowledge systems have provided information that … underscores the importance of culture in national development.
> (Document review, Extracts from the speech by the Minister of State for National Heritage on 01/03/06)

These remarks reconfirm that as a heritage Government institution, the NMK is a critical player in the economic, social and political development of the country. It plays an essential role in fostering and contributing to sustainability in Kenya through its research and education programmes (see Section 2.3). As part of its mandate, the organisation is expected to use its vast cultural resources to promote inter-ethnic understanding within the current diverse Kenyan ethnic groups (Hunting Technical Services, 1999; see Section 2.2.3). It has the capacity to foster processes of collective identity formation in an ethnically divided Kenyan society. The following remarks made by the President of Kenya

during the official launch of the Museum in Change Programme reiterate the role of heritage in collective identity formation:

> I expect the Ministry of National Heritage to come up with a clear programme and strategic plan for heritage management as well as develop a national policy for Kenya. Our heritage is important because it represents our cultural identity. We must not forget our rich cultural heritage despite the dynamic challenges of globalisation.
> (Document review, Extracts from Presidential speech made on 01/03/06)

In these remarks, the President of Kenya emphasises the importance of heritage in the construction of collective identity amongst Kenyans, based on a shared history. This has the potential to address the issue of ethnicity that straddles the Kenyan political and social landscape (see Sections 2.2.2, 2.2.3 and 2.3.3). However, the lack of a national policy on heritage issues constrains this potential. The NMK is expected to take a leading role in addressing this constraint. However, due to colonial legacies, there is a widespread perception amongst the Kenyan people that museums are elitist and foreign institutions (see Hunting Technical services, 1999; see also Section 7.2.2) for keeping old bones and artefacts (A7, A15 and FG2). According to A12, the Kenyan 'people have never identified themselves with the museum' (FG12). He critiqued the renovation and expansion of the Nairobi Museum for not including forms of African architecture (FG12). The view of the NMK as a place of keeping old bones (fossils) and artefacts is narrow, as it covers only one of its core functions of serving 'as national repositories for things of scientific, cultural, technological and human interest' (Government of Kenya, 2006, p. 135). A holistic view needs to encompass all the four core functions that include collection, research, conservation and public awareness programmes, as outlined in Chapter 2 (see Section 2.3.1).

The absence of a comprehensive research policy at the NMK constrained efforts to streamline its research role in fostering sustainability in Kenya (W2). It provided research scientists at the organisation with reasons to pursue projects with collaborating partners on an individual rather than an institutional basis (W2). The remarks by C1 during W2 that 'as donors kept putting money into specific areas of focus, we realised that we were also shifting and moving around as a result of the donor driven projects' substantiates this claim

(see Section 7.4.1). This implies that the research role of the NMK is influenced by donor driven projects. In W2 a group comprising A4, A5 and A16 had dialogue with C9, a researcher who represented the Director of Regional Museums, Sites and Monuments at the workshop, to explore how regional museums collaborated with local communities. This group reconfirmed the influence of collaborative partnerships in enhancing the identity and role of the NMK as a heritage institution with a capability to foster a sustainable society and environment. The group identified four areas in which the NMK is collaborating with local communities and the private sector through its regional museums. These are the involvement of local communities in: the identification of heritage sites, exhibition development and interpretation, biodiversity conservation and poverty alleviation programmes (see Section 2.3.3). In the next section I examine possibilities for enhancing the identity and role of the NMK as a heritage institution involved in fostering and contributing to a sustainable Kenya.

8.6.2 *Possibilities for improving the NMK identity*

The Museum in Change Programme and communicative interactions at the NMK provided possibilities for improving the NMK identity and strengthening its role in fostering a sustainable Kenya. The Museum in Change Programme sought to repackage the NMK as 'an institution that is relevant to the contemporary times' (C1) by increasing its legislative capacity to manage and conserve Kenya's heritage, and also expanding and revitalising its public programmes facilities (W2, see also Section 2.3.2). The renovation and expansion of the Nairobi Museum through the NMK Support Programme aimed at developing 'exhibitions that spark young people's interest in nature, culture and history, so that they will be encouraged to go on and pursue further studies' (Document review, Extracts from speech by Head of the Delegation of the European Commission to Kenya on 01/03/06). Communicative interactions during workshops (e.g., W2) and focus groups (e.g. FG2, FG14) yielded possibilities for improving the NMK identity and its role in heritage conservation. Such possibilities include: strengthening collaborative partnerships with local communities and organisations with similar interests (W2), holding open days for the general public (FG2) and engaging in an organisational wide rebranding programme (FG14). The use of open days and interactive public programmes provide possibilities for changing the poor public image of the NMK as a place for old bones and artefacts (A7 and

A15; FG2). In what follows, I draw upon FG3 and FG14 data to provide details on the role of branding to improve the NMK identity, as part of a social change process. According to A4, the NMK is a fragmented institution 'because we don't have a common vision or identity, i.e. who we are' (FG3). During the FG3 deliberations he posed these three questions to the participants:

- Who are we?

- How do we want to be seen?

- What are our values?'

A4 suggested the development of a distinct corporate identity through a rebranding of the NMK as a strategy for addressing these questions. He argued that, as employees of the NMK, we were defined by an institutional culture which is based on the values, norms, principles, attitudes and behaviour within the organisation. For A4

> Institutional culture is a state of values, norms and principles, which an organisation shares. This means that every person, every staff member in the organisation shares a state of values which is agreed on by the entire staff and management. So when we talk of the NMK, may be we want to say that one of our values is to uphold greatest respect for our customers … This one value will determine how you are going to behave and communicate within ourselves.
> (FG3, 15/09/05)

The development of the 2006 Service Charter at the NMK provides possibilities for enabling the NMK employees to recognise themselves, and be recognised by others, as implied by A4's remarks on institutional culture. The Charter outlines the core values and principles of the NMK, as a heritage service provider in Kenya (see also Section 7.3.1). This research process challenged the conceptualisation of culture, as aptly captured by A4, for implying a uniform and stable culture at the NMK (see Section 3.2.5). Conceiving culture as shared meanings entails reducing members of an organisation to the meanings (Archer, 1985). It entails what Willmott (2000, p. 106) terms "epistemic fallacy" where assertions of *being* are reduced to those of *knowing* (see Section 3.2.5). The research process investigated the concept *culture* as a distinct emergent stratum of reality pertaining

to relationships between *ideas* and their role in agential interactions, as shown in this chapter (Archer, 1985; see also Sections 9.2.2 and 9.3).

As mentioned earlier the development of a distinct corporate identity through a rebranding[60] of the NMK provides possibilities for improving the image of the organisation as a heritage institution involved in fostering a sustainable society (A4). Branding has been understood as a process that aims to link organisational identity and image (Stensaker, 2007). Causon (2004, p. 299) describe a brand as a way of "connecting people to the organisation, and opening up a platform for dialogue and exchange". During FG14, the Marketing Officer (A9), who was undertaking a Master of Business Administration degree, made a short presentation to participants on 'branding as a tool for enabling change'. This was in response to this question that I had posed to the participants – *How will the envisaged branding process enable a cultural change at the NMK?* A9, who was also the Marketing Task Manager on the Museum in Change Programme, defined a brand as a 'combination of attributes, communicated through a name, or a symbol, that influences a thought-process in the mind of an audience and creates value' (FG14). He explained the processes envisaged in the rebranding of the NMK which included holding seminars, data gathering, design of concepts and brand products and launching corporate brands. A9 reiterated that the 'branding process will take into account human resource challenges at the NMK' so that the staff can be motivated to deliver the brand. The presentation by A9 expanded the participant perspectives on the relationship between branding and organisational change as explained later in the next section that provides evidence of social learning processes related to issues of identity and the role of the NMK.

8.6.3 *Evidence of social learning processes*

The implementation of the Museum in Change Programme and communicative interactions at the NMK resulted in morphogenetic processes and the development of learning capabilities to address issues of identity and the role of the NMK in sustainability. The emergence of new regional museums (A15, FG15), the *National Museums and Heritage*

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[60] Rebranding has been described by Causon (2004, p. 300) as "a long-term, high-risk dependency strategy that takes guts, commitment and buy-in from all stakeholders; it is not just the province of the marketing department". However, it is beyond the scope of this study to explore the relationship between branding and social change in the context of sustainability.

Act, 2006 (Government of Kenya, 2006) and a revitalised Nairobi Museum are some of the social changes that occurred during the period of this research to strengthen the capacity of the NMK as a heritage institution. In addition, the branding programme mentioned in the previous section has since been implemented (see http://www.museums.or.ke). This has resulted in a corporate and brand identity that summarises the NMK vision and values towards positioning the organisation as a world-leading heritage institution and provider of research, conservation and public programmes. Based on W2 and W3 data, I briefly explain the emergence of the *National Museums and Heritage Act, 2006* (Government of Kenya, 2006) as an example of cultural morphogenesis in communities of practice.

Review of the legal framework was the only component of the Museum in Change Programme that came to completion during the data generation phase of this study (see Section 2.3.2). The review process that began in 1999 sought to repeal and consolidate the two statutes which governed heritage management – *The Antiquities and Monuments Act*, and the *National Museums Act* (Government of Kenya, 1983a, 1983b). Following this process, the Heritage Bill was published in 2003 and tabled in parliament in 2005. According to C1 – the NMK Director General, the review process involved the top management, legal consultants and the Board of Directors (W2). Although, the legislative review was a home-grown initiative, the European Union (EU) had pegged its support of the Museum in Change Programme on reforms in the management of Kenyan heritage (see Section 7.4.2). As a result, 'there has been a contention on … whether the NMK in itself thought that they needed to reform their laws or whether it was driven by the EU' (C5). The following extracts from a newspaper article by Fred Oluoch (2005, p.5), a special correspondent with *The East African Magazine* confirms this controversy:

> The long-delayed Museums Bill, which is expected to revolutionise heritage management in Kenya is finally on its way, as stakeholders have now thrashed out the contentious issues that had almost derailed its enactment … Besides the gazetting of property in private hands, other controversies that have dogged the Bill include the perception among certain stakeholders that the proposed legislation - just like the controversial Anti-Terrorism Bill – is foreign-driven and is meant to deprive Kenyans of the right to own and manage their own heritage.

These sentiments confirm that the Heritage Bill caused systemic contradictions within the Kenyan legal system. The assertion that the Bill was foreign-driven and aimed to deprive Kenyans of the right to manage their heritage is an example of where structural factors find their way into the cultural domain (Archer, 1995; see also Section 7.4.2). To allay fears that the Bill was in conflict with the constitution in relation to the right to own property, the NMK board and management team organised a two-day awareness workshop in 2005 for various stakeholders (W2). This workshop aimed to sensitise the Kenyan parliamentary committee on administration, national security and local authorities and various stakeholders in heritage management on the key features of the 2005 Heritage Bill (A4, C1). It resulted in amendments to make the Bill conform to existing laws. This led to its passage in the Kenyan Parliament and the emergence of a new legislation – the *National Museums and Heritage Act, 2006* (Government of Kenya, 2006), which became operational on 8 September 2006.

During W3, C5 – the NMK Legal Officer, shared her critical reflections on the emergence of the new *Act* and its implications for social change processes at the organisation. She stated three justifications for transforming and consolidating the previous two statutes that governed heritage management in Kenya. Firstly, the country needed clear and harmonised legal framework and procedures for heritage management and development of museums. Secondly, "we needed proper heritage organisation, institutional development and capacity for national museums in Kenya" (C5). Finally, there was a need to "align ourselves with emerging international conventions and thinking on heritage" (A5). As an emergent cultural property of the previous two statutes, the *National Museums and Heritage Act, 2006* (Government of Kenya, 2006*)* has powers which sought (C1, C5, W2 and W3):

- *To provide a clear legal framework for heritage management*
  The new *Act* has expanded the functions of the NMK from the previous two to four (see Section 2.3.1 for functions) and has increased the composition of the Board of Directors from nine to 13 members. In addition, the *Act* has reviewed the definition of

Kenyan heritage[61] to include the "concept of cultural landscape and geoparks that can be exploited for tourism and learning" (C5).

- *To create better conditions for the NMK institutional development*
  The new *Act* empowers the NMK to attract and retain competent staff and also to determine its financial operations (see Sections 8.4 and 8.5).

- *To confer the NMK more authority and flexibility to monitor heritage institutions*
  Through the new *Act*, the Minister in charge of National Heritage has authority to regulate the establishment, registration and operations of private museums.

- *To increase punitive measure for heritage violators*
  The penalty for defacing gazetted monuments has been increased from 10 000 Kenyan shillings to 1 million.

Revitalisation and expansion of the Nairobi Museum has led to major infrastructure developments that include an increased exhibition space, a new administration block and a visitor's centre. After remaining closed for over two years, a revitalised Nairobi Museum opened its doors to the public on 31/03/08 (see http://www.museums.or.ke). The Head of the Delegation of the European Commission to Kenya, expected the NMK to use the emerging revitalised Nairobi Museum 'as a neutral space to examine controversial areas of Kenya's history with an open respect for the perspectives of others and with the aim of fostering national unity' (Document review, Extracts from speech made on 01/03/06). These sentiments are reflective of Habermasian theory of deliberative democracy that underpins this research (see Section 3.4.3).

As discussed throughout this report, this research process both created and investigated democratic social learning spaces in which the participants raised and addressed sustainability issues freely, as implied by the Head of the Delegation of the European Commission to Kenya. It also provided opportunities for sharing new ideas and concepts as it happened during the presentation by A9 on branding (FG14; see previous section). The

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[61] The *National Museums and Heritage Act, 2006* (Government of Kenya, 2006) views heritage as natural features, geological formations of significance, delineated habitats of threatened biodiversity and areas of religious significance such as the Kaya Forests. It also views heritage in terms of monuments, architectural works, works of humanity that are of archaeological or palaeontologic interest and groups of buildings (*ibid*).

following reflective comments that the participants wrote on what they learned in FG14 corroborate this claim:

> Branding session by [A9] was enlightening, we should have more of these from focus group personnel in some of the task teams. (A12)
>
> Branding is a very important tool for ensuring positive change through staff involvement. (A5)
>
> Branding is a process that requires the participation of all players in an organisation. (A7)
>
> I learned a new concept of branding for the NMK and its applications to enhance public opinion transformation. (A6)
>
> Branding the NMK is a must for cultural change. (A19)
>
> That institutional change can be achieved through different modes, e.g. branding. (A15)
> (Participants' reflective comments from FG14, 01/11/06)

These reflections from the participants confirm the emergence of organisational learning and sustainability around the 'new concept of branding' (A6). The participants started associating branding with cultural change, participation and transformation. Branding as a tool for enabling social change can improve institutional cooperation, initiate internal organisational change, enable an organisation to rediscover what it is and its basic purposes and build relationships between the organisation and its customers (Stensaker, 2007).

In the next section, I offer data on the institutionalisation of social change processes and the emergence of organisational learning and sustainability in the NMK community of practice.

8.7   Institutionalising social change processes

This section of the chapter offers data from the third broad cycle of inquiry which explored how to institutionalise social change processes and the emergence of organisational learning and sustainability at the NMK. As mentioned in Chapter 6, *institutionalising* social change processes was the last phase in the critical action research exploration into organisational learning and sustainability that was undertaken as part of this study. The other phases are *initiating* social change process (first broad cycle) and *implementing* social

changes through communicative interactions (second broad cycle). In Section 6.5.2 I reported that the research activities of the third cycle focused on delineating social change processes (morphogenetic processes) and exploring ways of institutionalising those changes. According to Kanter (1983), institutionalisation of change is said to occur when the structures and culture surrounding a change also change to support it (Kanter, 1983; see also Doppelt, 2003).

For this research, institutionalisation is the process by which social change processes and the emergence of organisational learning and sustainability become embedded in the structural and cultural domains of an organisation. It is an ongoing process in which *morphogenetic relationships* that support organisational learning and sustainability become entrenched into organisational systems. Institutionalisation is thus a key component in enabling organisational learning and sustainability in communities of practice (see Section 9.5.3). In the next two sections, I first provide findings on the factors that enabled and constrained the institutionalisation of social change processes and the emergence of organisational learning and sustainability at the NMK. I then discuss possibilities for institutionalising social change processes in the context of environmental education and sustainability in the NMK.

8.7.1 Enabling and constraining factors

This study has revealed that the NMK is good at initiating and implementing social change processes such as in the Museum in Change Programme but, the organisation is poor at entrenching those social change processes into its structural and cultural systems. This assertion is corroborated by A12 when he observed that 'we are good at starting things but poor at sustaining them' (FG2). A number of factors pre-existed at the NMK to either enable or constrain the institutionalisation of social change processes and the emergence of organisational learning and sustainability. I offer evidence of the pre-existence of such factors that echo those which influenced participant learning capabilities and reflexivity for addressing sustainability issues as identified in the previous sections and Chapter 7.

In FG12 deliberations that reflected on organisational changes between April and September 2006, I shared with the participants the following description of institutionalising sustainability:

> Sustainability change will be said to be institutionalised at the NMK when it is formally and philosophically incorporated into the *structures* and *processes* of the organisation, consistently implemented, and supported by a *culture of change*, as reflected in the organisational norms, values and policies that advocate sustainability principles.
> (FG12 framework, 05/10/06, emphasis original)

This description, which was based on the theoretical underpinning of the study then, points to the initial attempts to explain what *institutionalisation*[62] meant in our context. Based on the above I posed this question to the participants – *Does the NMK have a culture of change?* (FG12).

The responses to the question revealed that the NMK did not have a culture of change, in other words, institutionalisation of social change processes was very poor at the organisation (A1, A16, A19, A22). According to A19, the NMK had 'poor mechanisms for institutionalising changes because our cultural assumptions are wrong'. A22 said that what pre-existed was a form of 'forced cultural change'. A15 pointed out that 'forced change is short-lived since people cannot change if they are not willing'. A16 gave an example of a 'failed forced cultural change' as in the efforts to improve work performance and punctuality through the signing of the attendance register (see Section 7.2.1). Forced cultural change, as implied by A22 referred to components of the Museum in Change Programme that were seen to be externally driven and not owned by most employees (see Section 2.3.5 and 7.4.2). However, in support of externally driven changes, A1 wanted the participants to 'take up issues raised for change' instead of blaming external forces. He was supported by A5 who said that 'even if change is externally driven, it is good for the organisation, there is need to own and share it'. Poor follow up was cited by A6 as a constraint to institutionalising change process. Power struggles within the top NMK management team was seen as another constraining factor in institutionalising social

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[62] My understanding of institutionalisation has since changed to discard the notion of *culture of change* as indicated in Section 8.1 following a deeper engagement with literature on critical realism (see Chapter 3).

change processes (A6, A16). Lack of trust due to poor 'communication and suspicion' (A22), 'vested interests' which negated team spirit and firm decision making (A1) and intolerance to criticisms (A16, A22) constrained further the institutionalisation of social change processes. These factors are similar to those that provided the NMK employees with reasons to maintain stability as identified in Chapter 7 and explained further in this chapter. In other words, contextual factors that enable or constrain agential learning capabilities and reflexivity for social change processes also influence the institutionalisation of those processes in a community of practice. I explore possibilities of addressing such factors in order to institutionalise social change processes.

8.7.2 Possibilities for institutionalising social change processes

This section draws substantially on Focus Group 13 and Workshop 3 data to explore possibilities for institutionalising social change processes and the emergence of organisational learning and sustainability at the NMK. FG13 explored key elements of institutionalising social change at the NMK. W3 group discussions investigated ways of enhancing the NMK organisational learning capability and addressing fears of social change. FG13 deliberations identified democratisation of structures and processes as being central to institutionalising social changes at the NMK (A6, A9; see also Section 8.3.2). Quoting from the Holy Book of the Koran, A6 reiterated that 'decisions are made through mutual consultations, through understanding each other'. Cultivating democracy at the organisation to allow employees speak openly provides possibilities for institutionalisation of the emergence of sustainability (A5). Use of smaller forums to deliberate on social changes (A1, A6 and A16), altering policies and procedures (A1, A16) and appreciating others through use of friendly language (A12, A16 and A21) were considered as possibilities for institutionalising change and the emergence of sustainability. Other possibilities identified by participants during FG13 deliberations were:

- Celebrating every change achievement to sustain further changes (A19)
- Creating a shared vision and owning up change processes (A5; see also Section 7.4.3)
- Putting in place a change team to sustain and manage change (A12, A19)

- Using branding as a tool to deliver totality of change and system-wide capacity building (A9; see also Section 8.6.2)

I draw on W3 data to provide two more possibilities for institutionalising social change processes. These are building the NMK organisational learning capability and addressing fears of social change.

Building the NMK organisational learning capability

The third session of W3 explored ways of building the NMK learning capability for continuous social change processes and the emergence of sustainability. Taking on facilitation roles, A6 and A19 asked the participants to work in groups and suggest topics, key groups and approaches aimed at developing the NMK learning capability. Appendix 10 on pages 417 shows a synthesis of the findings from the groups (see Table 8.4).

Table 8.4   Developing the NMK organisational learning capability

Key Groups	Topics to be Covered	When	Approaches	Sources of Funds
1. Board of Directors	Corporate governance, heritage management	Immediately on inception	Seminars & workshops	NMK, Ministry
2. Directors Executive Committee	Corporate governance, Human resource management, performance management, policy familiarisation, effective communication, leadership and systemic thinking skills, health and safety, labour laws and industrial relations, entrepreneurial and business skills.	Immediately and continuous	Seminars, Workshops, Refresher courses and Case studies.	NMK, Government of Kenya (Ministry of Heritage)
3. All Staff	NMK orientation, Customer relations, communication, health and safety issues, team building, performance management, institutional change, professional ethics, staff transformation.	Continuous	Focus groups, seminars, workshops, conferences, study tours, attachments, staff briefings, retreats, staff excursions.	NMK, international partners, Government.

Source: W3 data, 28/11/06

Table 8.4 shows topics that the participants suggested for developing learning capabilities within members of the NMK Board Directors, Directors Executive Committee and Operational (support) staff. The topics suggested in Table 8.4 are aimed at developing both individual and collective learning capabilities at the NMK. The participants suggested many topics aimed to develop the learning capabilities in the members of the Directors Executive Committee. The assumption which prevailed amongst the participants seems to be that although several structures and policies to enable institutionalisation of change processes were in place, those in positions of power were not willing to implement these. A17 asserted 'change must start from the top since it is the top that is central to facilitating change' (FG11). Increasing the capability of the leadership to learn has the potential to promote organisational learning at the NMK. Four types of organisational learning activities can be identified from Table 8.4 as follows (W3, see also Appendix 10, p. 417):

1.   Creating an environment for continuous learning which includes the participation of all actors at the NMK in individual and collective learning activities.

2.   Providing educational and training activities, e.g. refresher courses, to develop professional areas for specific groups.

3.   Using learning sources inside the NMK, e.g. workshops, seminars, staff briefings and joint ventures to enhance trust and collaboration in its communities of practice.

4.   Utilising learning sources outside the NMK, e.g. study tours, conferences and workshops to forge collaborative partnerships with other organisations.

These activities if implemented as a continuous cycle of improving the capabilities to learn individually and collectively can lead to institutionalisation of social change processes and the emergence of sustainability in communities of practice. This may address earlier remarks by A12 that 'we have had so many trainings … we do not see any change at all. We expect change but nothing is seen, things even become worse' (FG10; see Section 8.4.2). These remarks imply that building the capacity of people does not necessarily enhance an organisational learning capability. As mentioned in Chapter 2 (see Section 2.4.2), *Agenda 21* emphasises capacity building for both people and the organisation. This

research views organisational learning as a transformational process to which members of communities of practice individually and collectively contribute to their learning.

Identifying and addressing fears of social change

According to C7, Principal Administrative Officer, 'employees tend to resist change because of the fear of the unknown. They also fear change because they will lose their comfort zone' (W2). In Chapter 7 I reported that the Museum in Change Programme 'created fear and anxiety within the staff' as many associated the Programme with job losses (A4; see Section 7.2.2). Section 8.2.1 of this chapter identified 'fear of the unknown' (A14; see Section 8.7.2) as a constraint to information flows at the NMK. These assertions confirm that fear of the unknown is a major constraint to venturing into the uncharted territory of social change and easily taking on ideas to foster sustainability in an organisation.

The fourth session of W3 focused on identifying and addressing such fears with a view to institutionalising the emergence of organisational learning and sustainability. A15 who facilitated this session described fear as 'false evidence that looks real' (W3). She divided the participants in two groups and asked them to: identify fears of social change at both individual and group levels, prioritise those fears for social action and then suggest appropriate responses to dealing with the fears (see Table 8.5).

Table 8.5   Addressing fears of change in a community of practice

Fear type	Worrying question	Effects	Educative interventions
1. Fear of job loss	Will I have a job after the Museum in Change Programme is institutionalised?	Leads to anxiety and loss of motivation.	Competent human resource team, devoting time to those affected, assistance with finding new job, counselling, stress management.
2. Lack of information	Do we understand what the NMK is changing into?	Leads to a lack of shared vision.	Improve internal communication and information flows.
3. Change in Kenyan Government	Will we get the priority support if the regime changes?	Creates impasse in change	Lobby and ensure non-alignment to any political party.
4. Retaining quality staff	Will we competitively retain competent staff?	Reduces productivity	Increase revenue base and improve working conditions.

		and staff motivation.	Develop a clear succession plan.
5. Upsetting relations with donors.	Will our relationship with EU affect other collaborating partners?	Leads to anxiety in the top managers	Instil confidence in the donor community and strengthen collaborative linkages.
6. Lack of trust	Will we trust each other as a team?	Causes in fighting and low productivity	Undertake extensive consultation and inclusive decision making; and cultivate team building.

Source: W3 data, 28/11/06

Table 8.5 presents the fears which participants rated as high and required immediate social action. These fears of social change are representative of those identified by the participants during W3 discussions. They are emergent cultural properties of the NMK that arose from contextually mediated issues presented in the previous sections. They needed to be reduced to entrench social change processes in the NMK structural and cultural domains. Working through the fears for social change in a community of practice as shown in Table 8.5 can impact on achieving support for the institutionalisation of sustainability change. It has the transformative potential to (W3):

- build staff morale and support the institutionalisation of social change processes (A1, A23)
- improve the organisational learning capacity of the NMK for social change (A4, A6)
- provide a constructive platform for reducing the regrouping of actors against social change processes (A9)
- minimise systemic contradictions to allow continuous social change processes and the emergence of sustainability.

8.8   Summary

To summarise, this chapter has presented findings from the second and third cycles of inquiry which deliberated and explored possibilities for social changes and the institutionalisation of those changes within the NMK structures and culture. The chapter identified structural and cultural factors that pre-existed at the NMK to enable or constrain participant learning capabilities and reflexivity to address sustainability issues. The factors

were examined within five broad categories of issues. These are the issues of internal communication and information flows, staff motivation and development, decision making and leadership, financial management and the identity and the role of the NMK. As an emergent stratum of social reality, the NMK is defined by the interrelationships of basic assumptions and values within these broad categories. The chapter has explored possibilities for social change and the emergence of organisational learning and sustainability following the implementation of the Museum in Change Programme and environmental education processes at the NMK. I have provided evidence of social change (morphogenetic) processes and the development of participant learning capabilities to address sustainability issues. The chapter also offered data on the institutionalisation of social change processes in the context of environmental education and sustainability. Some of the elements identified as being essential in the institutionalisation of social change processes include developing organisational learning capability and addressing fears of social change.

Part 5 that follows discusses the findings offered in Chapter 7 and this chapter. Chapter 9 discusses the ontological, epistemological and pedagogical implications of exploring organisational learning and sustainability using critical action research methodology in the context of improving heritage conservation and environmental education processes of the NMK.

PART 5   Discussion of Findings

In this final part of the thesis I examine the implications of exploring organisational learning and sustainability at the National Museums of Kenya (NMK) within a critical action research methodology. I discuss findings from the study to provide a deeper understanding of ontological, epistemological, methodological and pedagogical implications of exploring organisational learning and sustainability in the NMK community of practice. The research aims and theoretical foundations presented in Part 2 provide the framework for the discussion of findings. Part 5 also offers reflections, conclusions and recommendations on exploring organisational learning and sustainability in an organisational-based community of practice through environmental education processes.

Part 5 contains the following chapters:

Chapter 9   Ontological, Epistemological and Pedagogical Implications of the Study

Chapter 10   Reflections, Conclusions and Recommendations

Chapter 9   Ontological, Epistemological and Pedagogical Implications of the Study

9.1   Introduction

The central thesis of this study is that exploring morphogenetic relationships through communicative interactions in communities of practice can deepen context specific understanding of organisational learning and sustainability (see Section 1.1). In this chapter, I discuss the findings presented in Part 4 to indicate the substance of this thesis. The three research aims outlined in Chapter 1 and the theoretical perspectives offered in Part 2 provide a framework for the discussion. The discussion is organised in four broad sections. Firstly, I discuss findings on the identification and reflexive deliberations of contextual factors that influenced participant learning capabilities to address sustainability issues. The Archerian morphogenetic approach, which involves three phases of *conditioning*, *interaction* and *elaboration*, provides a theoretical lens for this discussion. Secondly, I examine findings on critical reviews of assumptions and values that underpinned the NMK as a social system and cultural heritage organisation. Thirdly, I discuss ways of *knowing* the social reality of enabling organisational learning and sustainability using a lens from Habermasian critical theory. Finally, I clarify the implications of exploring organisational learning and sustainability within the Lave and Wenger communities of practice approach.

9.2   Identifying and acting on contextual issues

This section examines findings from the first research aim which sought to identify and act on contextual issues related to organisational learning and sustainability (see Sections 1.3.1 and 7.2). The identified issues were in the form of structural and cultural factors that influenced participant learning capabilities and reflexivity to address sustainability issues (see Section 7.2.2). I first discuss structural and cultural factors that pre-existed at the NMK to provide participants with reasons to enable or constrain social change processes in the context of organisational learning and sustainability (structural and cultural conditioning). I then explain the consequences (social and socio-cultural interactions) of implementing

communicative interactions as environmental education processes to enable social change and the emergence of sustainability. Finally, I delineate the resultant social learning outcomes (structural and cultural elaboration) at the NMK.

9.2.1 Structural and cultural conditioning

Through a collaborative critical analysis of an organisation as a social system, members of a community of practice can identify structural and cultural factors that condition their agency to address sustainability issues (see Section 7.2). In this research project, agency was conceptualised as the creative role of members of a community of practice and the capability to choose to use their emergent powers of reflexivity to address sustainability issues (Archer, 2003; see Section 3.2.3). I understand structure as a network of internal social relations in a community of practice that influence communicative interactions aimed at enabling organisational learning and sustainability (see Section 3.2.4). Structures provide the powers, in terms of the learning capabilities and reflexivity of participants or material resources, which they choose to mobilise in the context of enabling organisational learning and sustainability (Bhaskar, 1986; see Section 7.5). Culture refers to the relationships between ideas and their role in conditioning agential learning capabilities and reflexivity to address sustainability issues in a community of practice (see Section 3.2.5). This conceptualisation of structure and culture (see also Sections 3.2.4 and 3.2.5) necessitates making a parallel distinction between the emergent powers of people and those of the *parts*, i.e. structure or culture (see Section 1.4.1).

In her methodological principle of *analytical dualism,* Archer (1995) emphasises the necessity of distinguishing the interplay between agency and structure or culture without conflating them. This distinction is analytical because agency and structure are interdependent, and dualist because each is held to posses its own emergent powers (Willmott, 1997). Exploring morphogenetic relationships through communicative interactions in the NMK community of practice depended upon making such analytical distinctions (see Sections 7.2.2 and 8.2.1). Below, I discuss broadly how emergent structural and cultural factors that pre-existed at the NMK confronted participants with both possibilities and constraints in the context of enabling organisational learning and sustainability (see Section 7.2 and Chapter 8).

Broader contextual influences

The broader Kenyan context consists of historically constituted interactions between the biophysical, political, social and economic dimensions of the environment (see Section 2.2) and provides participants with both possibilities and constraints for enabling social change (see Section 7.2). Cultural factors such as ethnicity, high levels of poverty, entrenched corruption and high incidences of HIV/AIDS, which characterise the Kenyan social environment, constraining participant learning capabilities and reflexivity to address sustainability issues (see Sections 2.2.2, 2.2.3 and 7.2). For example, due to high levels of poverty in Kenya, employees avoid challenging decisions for fear of losing their jobs. This creates passivity amongst actors which undermines democratic deliberations in organisations such as the NMK. Support and funding from the Government, donors (e.g. EU) and external collaborators results in both constraint and opportunity providing possibilities for participants to pursue projects aimed at fostering sustainability at the NMK and in the country (see Section 8.5.1). As a constraint, over-reliance on external funding creates a 'donor dependence syndrome' (A12), as further discussed in Section 9.3.5.

Poor governance systems in the Kenyan public sector constrained social change processes and the emergence of sustainability at the NMK (see Chapter 8). These systems were associated with the following structural and cultural factors (Rugumyamheto, 1998; see also Section 2.2), which operated at the NMK as constraints for social change processes:

- *Highly centralised decision-making processes*
  Decisions at the NMK were made by the top management team (Directors Executive Committee) and the Board of Directors (see Sections 8.3.1 and 9.3.2). This top-down governance system marginalised participants in making and implementing decisions related to organisational learning and sustainability (see Section 9.3.2). The pre-existing 'very tall and many layered' governance structures created bureaucratic procedures which slowed down decision-making processes (C1).

- *Ethnicity and patronage in appointments and promotions*
  The Kenyan patronage and ethnically-based political system provided politicians and chief executives with the means to use ethnicity as 'a positional survival strategy' to protect their own interests (A6). As a result, ethnicity and patronage influenced

appointments and promotions in the Kenyan public sector and at the NMK (see Sections 8.4.1 and 9.3.4). This constrained agential learning capabilities and reflexivity to address sustainability issues in the NMK community of practice.

- *Employment of high levels of unskilled staff*
  At the start of this study, the NMK had a large number of staff on prolonged temporary employment (casuals) and fellowship terms (see Section 8.4.1). Large numbers of unskilled staff employed on a prolonged basis generated social dynamics of disrespect in terms of rights-based recognition and social esteem in the NMK community of practice (Honneth, 1999).

- *Low and inequitable compensation levels for the employees*
  As stated in Chapter 8 (see Section 8.4.1), the participants operated under poor working conditions with low and inequitable pay rates. The resultant brain drain led to a loss of high quality staff (e.g. A20) and constrained participant learning capabilities to enable organisational learning and sustainability.

- *Ineffective training programmes*
  Pre-existing ineffective training programmes at the NMK resulted in individual learning that had no impact on the overall development of the organisation (see Sections 8.4.2 and 8.7.2). Training programmes were 'ad hoc and not needs driven' (A20) and only focused on developing individual learning capabilities, as opposed to collective learning required for sustainability change (see Section 8.7.2).

- *Low budgetary allocations to operations*
  The budgeting procedures and financial controls at the NMK were not clearly defined. The resulting poor budgeting systems and low budgetary allocations continually constrained the implementation of sustainability programmes by the participants.

The Kenya Government Civil Service Reform Programme (CSRP), which was developed to address poor governance systems, sought to create an efficient, productive and results-oriented public sector (Nzioka, 1998, see Section 2.2.2). The programme influenced social change processes at the NMK, as an emergent cultural property of the Kenya Government. It provided participants with possibilities for enabling social change and the emergence of

sustainability through the Museum in Change Programme (see Sections 2.3.2, 8.2.2, 8.4.2 and 8.5.2).

The Museum in Change Programme

The Museum in Change Programme provided a framework for implementing the reform components of the Kenya Civil Reform Programme. The four components of the Museum in Change Programme described in Chapter 2 (see Section 2.3.2) provided possibilities for participants to enable social change processes and the emergence of sustainability. Most of the participants (e.g. A4, A9, A10, A14, A15 and A16) were actively involved in implementing the Museum in Change Programme. However, the programme also developed constraints to social change as it caused fear and anxiety about possible job losses amongst the participants (see Section 7.2.2).

Institutional structures and policies

Governance structures and policies at the NMK influenced the social learning context of the participants. Lack of policies or poor policies on communication, human development, financial management and heritage conservation processes provided constraints in terms of addressing sustainability issues holistically (see Figure 2.1). For example, the absence of a comprehensive research policy provided research scientists (e.g. A1, A2, A15 and A18) with reasons to undertake projects with collaborating partners on an individual rather than an institutional basis. Many policies (e.g. staff recruitment and collection policies) remained unimplemented (see Section 8.4.1). However, established departments, staff positions and roles provided possibilities to recruit qualified people for performing heritage conservation activities.

The NMK mission and vision statements together with the *National Museums and Heritage Act* (Government of Kenya, 2006; see Section 2.3.1), provided possibilities for participants to address sustainability issues in the context of heritage conservation processes. The existence of diverse natural history and cultural collections, regional museums and gazetted sites across the country presented possibilities for participants to address sustainability issues within a wheel of interacting concerns depicted in Chapter 2 (see Figure 2.1).

Historical factors and colonial legacies

The historical role of the NMK in heritage conservation and environmental education processes provided participants with possibilities to carry out education, research and conservation programmes towards fostering a sustainable society and environment. Colonial legacies operating as emergent cultural properties, provided corporate agents at the NMK with the means to pursue authoritarian and top-down approaches to governance (see Section 7.2.2). A top-down governance model constrained participant learning capabilities and reflexivity to improve communication and democratic forms of leadership (see Sections 8.2.1, 8.3.1 and 9.3.2). Colonial legacies and historical factors contributed to a widespread perception amongst the Kenyan people that museums were elitist and foreign institutions for keeping artefacts and old bones (see Section 8.6.1). This constrained participant learning capabilities and reflexivity to undertake sustainability projects with local communities.

Participant interests and positions

Participant professional interests and positions at the NMK, as displayed in Appendices 1 and 2 (see pages 396-400) were enabling structural factors in the context of achieving systemic changes. As explained in Chapter 6 (see Section 6.3.2), the participants were middle-level managers drawn from all departments at the NMK. Participants such as A4, A6, A8, A15 and A17 were recruited as heads of departments. This composition of participants ensured a sufficiently powerful community of practice to implement new ideas, practices and values on sustainability. All the participants belonged to other communities of practice within and beyond the organisation. The research project also drew participation from the top NMK managers whom I regarded as corporate participants (see Section 5.4). Whereas some corporate participants (e.g. C1, C2 and C5) used their reflexive powers to enable social change processes, others (e.g. C3 and C4) were known to prevent the emergence of sustainability (see Sections 5.4.2 and 8.5.3).

As highlighted in this discussion, structural and cultural factors in an organisation have the power to confront actors with situations which provide both possibilities and constraints for social change. Archerian social realism (see Section 1.4.1) asserts that such situations have an objective existence, regardless of the perceptions of actors. As a social system, the NMK

had *real* emergent structural and cultural powers, which conditioned participant learning capabilities and reflexivity. However, these powers never determined participant learning capabilities and reflexivity to enable social change and the emergence of sustainability. In the next section, I briefly examine how the participants exercised their reflexivity and their learning capabilities during social and socio-cultural interactions.

9.2.2 *Social and socio-cultural interactions*

Social and socio-cultural interactions resulted from implementing educational interventions in the NMK community of practice. These interventions sought to develop the learning capabilities and reflexivity of participants to *mediate* the aforesaid structural and cultural constraints. According to Archer (2000), reflexive deliberations are at the core of the interaction between agency and structure (social interactions) and agency and culture (socio-cultural interactions), during social change processes. I examine the consequences of implementing educational interventions in the NMK community of practice to address structural and cultural constraints discussed above.

Social interactions in the NMK community of practice

A key dimension of critical action research in this study was to create relationships between participants, and social learning spaces for democratic deliberations (see Sections 5.4.1 and 5.4.2). In this research process, I provided participants with opportunities to express their creative and reflexive potential through collective learning in focus groups and workshops. Findings presented in Chapters 7 and 8 confirm the development of participant learning capabilities and reflexivity to address various dimensions of sustainability issues (see also Section 9.4). Participant learning capabilities and reflexivity developed from their involvement in the collaborative inquiry into the Museum in Change Programme, addressing oppressive workings of power and cultivating democratic relationships at the NMK. Social interactions in the NMK community of practice therefore had the following characteristics:

- *Articulation of social actions*
  Through integration of action, participation and research in a series of flexible cycles (Greenwood & Levin, 2007; Somekh, 2006), I engaged the participants in collective

processes of planning, action and reflection on social learning outcomes (see Chapter 6). For example, the participants developed various social actions to improve communication and information flows at the NMK (see Sections 8.2.2 and 9.3.3). These processes provided avenues for argument, diversity, pluralism, exchange of ideas and meaningful participation in the community of practice.

- *Cultivation of democratic relationships*

  To cultivate democratic relationships amongst participants I negotiated conditions for participation that were based on "equality, harmony, acceptance and sensitivity" (Stringer, 2007, p. 28; see Section 6.3.3). Furthermore, social interactions were based on Habermasian theories of communicative action and deliberative democracy, presented in Chapter 3 (see Section 3.4 and 9.4). Generally, I provided the participants with social learning spaces that fostered dialogue and democratic relationships towards the emergence of organisational learning and sustainability (see Sections 5.4.1, 5.4.2, 8.3.3 and 8.4.3).

- *Investigation of possibilities for social change*

  As illustrated in Chapter 8, participants deliberated and investigated possibilities for social change processes and the emergence of sustainability. They investigated structurally mediated and interacting factors on internal communication, governance, staff motivation and development, financial management and the identity and role of the NMK (see also Section 9.3). This generated a systemic and critical understanding of enabling organisational learning and sustainability at the NMK.

- *Exploration of power relations*

  The nature of power relations in a community of practice forms the basis of any social change process and the emergence of sustainability. I therefore involved the participants in exploring the ways in which power was embedded and reinforced in socially and historically constituted governance structures at the NMK (see Sections 7.2 and 7.4.2). This exploration was informed by perspectives from both critical theory and an Archerian morphogenetic approach. The participants identified and discussed oppressive and productive workings of power as presented in Chapters 7 and 8 (e.g. Section 7.2, 7.4.2 and 8.3). For example, they identified and discussed visible, hidden and invisible mechanisms through which power operated at the NMK.

Socio-cultural interactions in the NMK community of practice

Many environmental education writers (e.g. Fien & Trainer, 1993; Huckle, 1993; Tilbury & Wortman, 2004) argue that social change in the context of sustainability cannot be accomplished without transforming dominant assumptions and values in an organisation (see also Doppelt, 2003). Transforming cultural constraints to agential learning capabilities and reflexivity for social change necessitated a critical review of assumptions and values underlying the NMK (see Section 9.3 for details). The process was a form of *cultural analysis* that generated social learning processes among the participants (McLaren 2003; see Section 7.5). It deepened an understanding of socio-cultural interactions in the context of enabling organisational learning and sustainability. Socio-cultural interactions in the NMK research group community of practice involved:

- *Creation of personal visions of a sustainable future for NMK*

  Envisioning, also known as *futures thinking* has the potential to transform the way members of a community of practice relate to the future and act in the context of sustainability (Tilbury & Cooke, 2005). Engaging the participants in futures thinking energised them to take a stand for a preferred sustainable NMK. They started associating a sustainable future for NMK with improved governance systems, increased information flows, motivated and well-developed staff, improved revenue generation and an enhanced role in heritage conservation. This provided a basis for a shared interpretation of the meaning of sustainability as a concept and an engaging evolving, social learning process (see Section 7.3.2).

- *Interpretation of the meaning of sustainability*

  Sustainability is regarded as an *essentially contested concept* that generates different socio-cultural meanings in communities of practice (see Section 4.3.1). Participant reflexive deliberations on this concept generated various interpretations (see Sections 7.3.2 and 9.5.2). Some participants interpreted sustainability to mean collaborative partnerships between organisations (e.g. A9 and A15) while others (e.g. A1) associated the concept with hegemonic influences of donor-funding agencies. The existence of multiple interpretations of the meaning of *sustainability* highlights the importance of conceptualising the concept as an ongoing social learning process that seeks cultural change in a specific community of practice (see Section 9.5.2).

- *Articulation of views on the notion of museum in change*

  In Chapter 3 (see Section 3.2.5) I theorised that the cultural domain is *objective* and has independent relations among its components that include theories, beliefs, values and notions, such as *museum in change*. Although the notion of *museum in change* emerged from marketing activities of the NMK Public Relations Department, it occurred independently of members of the department (e.g. A4) who coined it as a framework for implementing changes in the organisation. Participant deliberations on this notion yielded diverse perspectives and assumptions in terms of social changes that were taking place at the NMK (see Section 7.4.1). In this research project, *museum in change* was viewed as a holistic and systemic approach to social change in the context of enabling organisational learning and sustainability at the NMK.

- *Critical reviews of assumptions and values*

  As discussed in more detail in Section 9.3 of this chapter, I engaged the participants in reviewing and challenging basic assumptions and values underlying the NMK. The participants also explored critical alternatives and reconstructed possibilities to improve heritage conservation processes in the context of sustainability (see also Chapter 8).

Unification of structural and cultural analysis

In an organisation, such as the NMK, cultural factors can find their way into the structural domain and also, structural factors can find their way into the cultural domain. Archer (1995) terms this the *unification of structural and cultural analysis* (see Sections 7.4.2 and 8.6.3). For instance, the European Union (EU) to assert power at the NMK pegged its funding of the Museum in Change Programme to legal reforms in the management of heritage in Kenya. The Heritage Bill created systemic incompatibilities within the Kenyan Government on the contention that it was foreign-driven and sought to deprive Kenyans of the right to manage their own heritage. The resulting power and cultural struggles delayed the onset of the EU-funded components of the Museum in Change Programme, confirming how socio-cultural interactions penetrate the structural domain.

The phase of social or socio-cultural interactions in a social change process is characterised by attempts to develop the agency or reflexive powers of actors in a community of practice.

If the distribution of power in an organisation is such that any attempt at social change is suppressed, then it does not matter whether its cultural system includes ideas that are inconsistent with sustainability that demands urgent change (Archer, 1995). Exploring social and socio-cultural interactions, as contradictory or complementary, provides the basis for understanding morphogenetic or morphostatic processes in a community of practice as discussed in the next section.

9.2.3 *Social and cultural elaboration*

In the third cycle of this study, I delineated social learning processes of change and development through analysis of situated communicative interactions (see Sections 6.5, 6.6 and Chapter 8). These were in the form of participant written reflections, dialogue and reflexive comments. The resulting social learning processes were the outcomes of the Museum in Change Programme and educational interventions for enabling social change processes and the emergence of sustainability. According to Archer (1995), such interventions may either lead to social change (morphogenesis) or maintain the status quo (morphostasis). In Chapter 3, I explained that morphogenesis results in a process of social or cultural elaboration which in turn provides possibilities for further cycles of social action (see section 3.3.1). Conversely, morphostasis is a consequence of social and cultural reproduction or adaptation. I provide examples of morphogenetic and morphostatic processes from this study.

Evidence of social elaborations and reproduction

Chapter 1 (see Section 1.4.1) clarified that structures exert causal influences on social interactions, while the actions of individuals and groups affect social structures by modifying them. Morphogenetically structure predates action which, in turn, reproduces or transforms the structure (Archer, 1995). Social interactions at the NMK were characterised by systemic incompatibilities or complementarities which causally conditioned the learning capabilities and reflexivity of the participants. Systemic incompatibilities occur when actors, with vested interests, prevent the emergence of new social relations and sustainability in an organisation. Examples of social elaboration and reproduction from this study include:

- *Improvement in communication and information flows*

  A news bulletin, *Museum in change*, emerged out of the social interactions between the European Union (EU) and the NMK (see Section 8.2.3). The EU funded the publication of the bulletin through the NMK Support Programme. As a communication tool, the bulletin provided a useful forum for the participants to express their views on sustainability issues (e.g. NMK, 2006a). One staff briefing session aimed at fostering democratic deliberations between the top managers and other employees was held during this study. However, failed efforts by the Public Relations Department (A4) to revitalise the NMK newsletter maintained the status quo (morphostasis). I attributed this morphostatic relationship to systemic incompatibilities that prevailed within the Department at the time of implementing this research project (see Section 8.2.3).

- *Emergence of new governance structures*

  Following the implementation of the Museum in Change Programme, new governance structures emerged from those that pre-existed at the NMK (see Sections 2.3.1, 8.3.3 and 8.4.3). These new structures aimed at strengthening the institutional capacities of the NMK for improved performance, devolved decision-making processes and enhanced delivery of services (see Section 9.3.2). Emergence of new governance structures, as social elaboration, led to an increase in the number of roles attributable to actors at the NMK as in double morphogenesis. This was evident in the appointment of new Assistant Directors for regional museums, the creation of a new directorate of corporate development and the rationalisation of staff (see Sections 8.3.3 and 8.4.3). On the other hand, participant efforts to establish a budgeting committee to streamline financial management *reproduced* the status quo (see Section 8.5.3). This is an example of where communicative interactions, as educational interventions, led to a morphostatic process. Within his structural location, the Financial Controller failed to exercise powers and resources to change the social reality of poor budgeting systems that constrained social change.

- *Improvement in salaries*

  The issue of low and inequitable pay levels that led to the brain drain at the NMK was addressed through a pay-rise following a presidential intervention (see Section 8.4.1).

This intervention highlighted critical realist emancipatory claims that structures are transformable through the intentional exercise of human agency, and humans are not necessarily equal in their agency. In this case, the Kenyan President had more access to the structural resources needed to transform salaries at the NMK.

- *Revitalisation of the Nairobi Museum and emergence of new museums*
  The Museum in Change Programme resulted in the emergence of new regional museums and a revitalised Nairobi Museum. As emergent structures of the NMK, these new facilities are expected to mobilise resources towards fostering a sustainable Kenyan society through enhanced heritage conservation processes (see Section 8.6.3).

Evidence of cultural elaborations and reproduction

The amount of cultural uniformity produced by the introduction of new ideas, beliefs, values and knowledge on sustainability determines the possibilities of cultural *elaboration* or *reproduction* (Archer, 1985). Cultural elaboration occurs if the new ideas on sustainability are consistent with those already in existence. It also takes place if both the new and old ideas are modified to remove or minimise systemic strains. Conversely, cultural reproduction occurs when new ideas on sustainability are adapted to fit with the existing ones in a community of practice. Within the supportive framework of the Museum in Change and the Kenya Government Civil Reform Programmes, the participants took part in the introduction and assimilation of new ideas, values, beliefs and concepts as in cultural morphogenesis. The emerging socio-cultural consequences are:

- *Revision of policies and development of new ones*
  Participants as members of various communities of practice at the NMK took part in the revision and formulation of new policies. These included training, job succession and research collection policies (see Section 8.4.3). New ideas on performance contracting were accepted at the NMK to replace pre-existing staff appraisals. However, the introduction of new values through the 2006 Service Charter (see NMK, 2006b) were adapted to fit pre-existing ones, as a form of cultural reproduction (see Section 7.3.2).

- *Emergence of a new Heritage Act*

  The emergence of the *National Museums and Heritage Act* (Government of Kenya, 2006) was a classic example of cultural elaboration in which both new and old ideas were modified to remove contradictions in heritage management and conservation in Kenya (see Section 8.6.3). The new Act was an emergent cultural property of two statutes – the *Antiquities and Monument Act* and the *National Museums Act* (Government of Kenya, 1983), which were repealed and consolidated to provide an appropriate legal framework for heritage management and conservation processes.

- *Rebranding of the NMK*

  Rebranding, as a new concept was introduced and accepted by the participants as a tool for enabling social change processes within the framework of the Museum in Change Programme (see Section 8.6.3). Rebranding has resulted in a corporate and brand identity that summarises the NMK vision and values of a leading heritage conservation and environmental education centre.

- *Emergence of new ideas and values on sustainability*

  Through communicative interactions, the participants generated new ideas and values for improving organisational learning and sustainability practices. For example, the participants generated values and pathways to fostering a sustainable future for NMK during envisioning exercises (see Sections 7.3.1 and 9.5.2). Participant visions supported values such as equity, efficiency, professionalism, democracy and teamwork. Some of the ideas (e.g. management staff briefings) for improving communication were accepted at the NMK (see Section 8.2.3).

Evidence of elaboration of agency

Cultural and structural elaborations as explained above result in elaboration of agency in a community of practice. Elaboration of agency also occurs when primary agents become corporate agents and after agents regroup into actors in an organisation (Archer, 1995; see also Section 3.3.4). Elaboration of agency is thus the dynamic interplay of corporate agents pursuing their interests and the reaction of primary agents in an organisation. The process is usually shaped by the amount of resources and power available to actors in a community of practice. Due to varying distribution of resources, corporate participants (e.g. C1 and C4)

had more bargaining power, negotiating strength and transformational power to enable social change processes at the NMK (see Sections 5.4.2 and 8.4.3). In organisations, power relations can prevent restructuring among corporate agents to constrain elaboration of agency. However, agents and actors are fixed in persons who have the capabilities to be creative and make choices.

Elaboration of agency is thus not automatic, even when constraining power relations are challenged and addressed, as undertaken in this study. For example, even though a dialogue with the NMK Financial Controller (C4) during a workshop session challenged the poor budgeting mechanisms at the organisation, this did not lead to a transformation in agency (see Section 8.5.3). However, the formation of the research group, as reported in Chapter 6 (see Sections 6.3.2 and 9.5.1) provides an example of elaboration of agency in which the participants, as primary agents regrouped into corporate agents. This enabled the participants to hold dialogue with the top NMK management team, during the research project, with a view to enabling the emergence of sustainability. Elaboration of agency also occurred during communicative interactions that developed participant learning capabilities and reflexivity to address sustainability issues. This is discussed later in Section 9.4. The next section provides further details on the basic assumptions and values that defined the NMK as an emergent stratum of social reality.

9.3   Reviewing assumptions and exploring critical alternatives

In this section, I discuss findings from the second research aim which critically reviewed assumptions and values underlying the NMK, and explored critical alternatives (see Section 1.3). Based on the Archerian morphogenetic approach I interpret basic assumptions and values, as ideational elements of culture, and their role in agential interactions in a community of practice (see Section 3.2.5). Processes of reviewing assumptions and values, in order to explore critical alternatives was based on the premise that, when doing pedagogy in an organisation, it is important to name and problematise the prevailing social relations, experiences and ideologies (Doyle & Singh, 2006; Giroux, 1981). These processes confirmed the emancipatory intent of an action research project incorporating both Archerian and Habermasian theoretical perspectives.

Hinchey (2004) asserts that sound assumptions usually lead to effective actions and rewarding results while unsound ones are likely to prompt unwise actions and unhappy consequences. Acceptance of sound assumptions at the NMK led to the cultural elaborations discussed in Section 9.2.3. Making explicit the assumptions underlying thoughts and actions in an organisation, through critical questioning and reflection, as investigated in this research project, is a difficult and threatening process for actors (Brookfield, 1990; Hinchey, 2004). The process challenges the most cherished beliefs, ideas and values of actors. Through reflexive deliberations, envisioning exercises and critical questioning of participant organisational learning experiences, I brought to the surface basic assumptions and values that defined the NMK, as an emergent stratum of social reality in the context of heritage conservation processes and sustainability (see Figure 9.1).

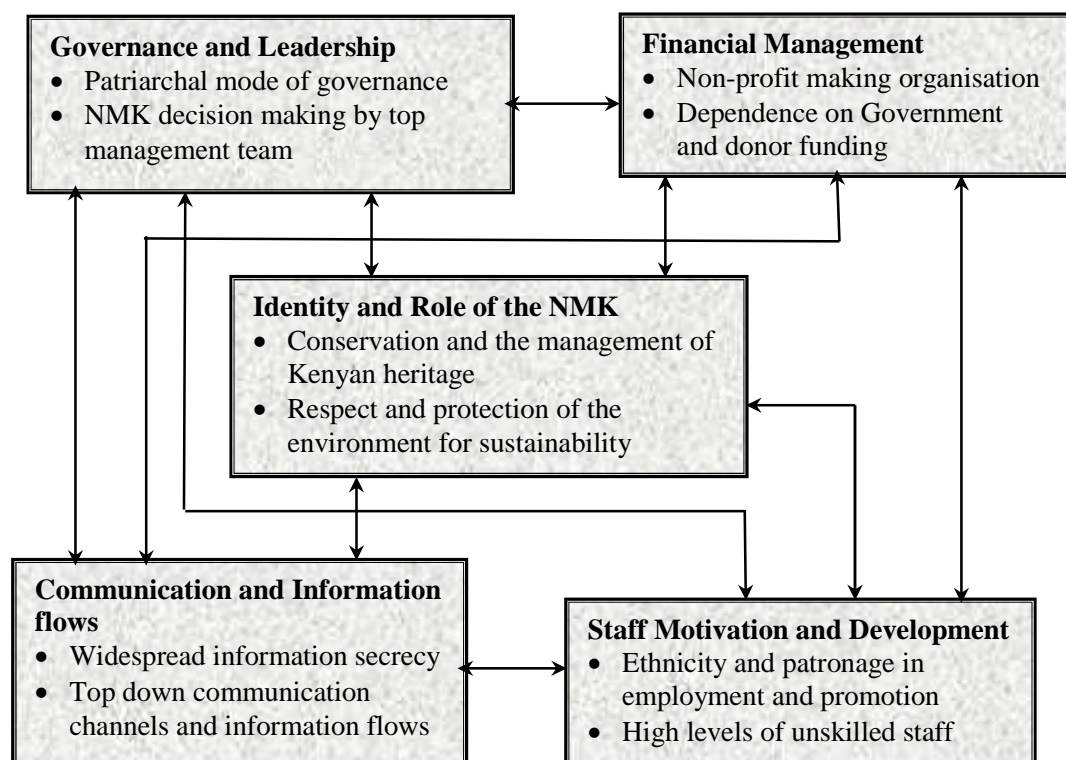**Figure 9.1**   The NMK as an emergent stratum of social reality

Figure 9.1 illustrates the interrelationships between underlying assumptions and values of the NMK. These can be seen as contextually mediated themes of governance, the identity

and role of the NMK, financial management, staff motivation and development and internal communication (see Chapter 8). The themes are reflective of the political, biophysical, economic and social dimensions of sustainability and environmental concerns. Basic assumptions and values within these five interlocking themes, inevitably and unconsciously influenced heritage conservation and environmental education processes at the NMK. They defined the frameworks, documents, language, tools, information and ideas that communities of practice at the organisation shared (see Section 4.2.2). Exploring their interrelationships with reference to findings on the contextual issues presented in Chapters 7 and 8 (discussed in Section 9.2.1) can provide a deeper understanding of the complex social reality of enabling organisational learning and sustainability. However, this list does not exhaust all the possible basic assumptions and values that operated at the NMK since the research project focused on only one community of practice.

In the next sections, I draw on findings from Chapter 8 to discuss the assumptions and values which defined the NMK using the five interlocking themes shown in Figure 9.1. All through the sections, I explain alternative assumptions and values that were *under construction*[63] following the implementation of communicative interactions within this study. These alternatives are based on Habermasian critical theory described in Chapter 3 (see Section 3.4).

9.3.1 Assumptions and values on the identity and role of the NMK

The assumption that the *basic work of the NMK is to carry out heritage conservation processes and dissemination of knowledge for the benefit of humankind* was central to the identity and role of the organisation in fostering a sustainable Kenyan environment (see Sections 2.3.1 and 8.6). It defined the communities of practice that operated at the NMK and offered a shared domain of knowledge for the participants. However, heritage conservation as a shared domain provided participants with both possibilities and constraints in the context of enabling organisational learning and sustainability (see Section 9.2.1). It comprised contextual issues that the participants experienced in their efforts to

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[63] The alternative assumptions and values presented here defined the identity of the NMK as a heritage institution. According to Chambers (2004), identities, norms and ethical frameworks are always under construction and always need to be understood as works in progress.

enable social change and the emergence of sustainability. Through envisioning and critical questioning, I engaged the participants in exploring alternatives assumptions and values (see Sections 7.3.1 and 8.6). Some of the new values that the participants generated included equity, memorability, efficiency, professionalism and national identity among others (see NMK, 2006b for core values). Further, the participants reconstructed the following possibilities for improving the identity and role of the NMK in enhancing heritage conservation processes towards a sustainable Kenyan environment:

- Developing a national policy on heritage management and conservation processes (see section 8.6.2).
- Being true to espoused values and principles as articulated in the 2005-2009 Strategic Plan and the 2006 NMK Service Charter (see NMK 2005 and 2006b; see also Sections 7.3.2 and 7.5.1).
- Holding open days, employing interactive public programmes and rebranding the NMK in order to transform the poor public perception of museums amongst the Kenyan general public (see Section 8.6.2).
- Fostering a distinct and professionally managed NMK that represents the identity of Kenya both in its architecture and gallery displays (see Section 7.3.1).
- Establishing collaborative partnerships with local communities and other relevant organisations (see Section 8.6.2).

These possibilities have the transformative potential of cultivating communities of practice within and beyond the NMK for the purposes of social learning processes and the emergence of sustainability. They focus on opening dialogue between actors at the NMK and those within the broader context and social world of Kenya.

9.3.2   Assumptions and values on governance systems

The findings on issues of decision making and leadership confirm that governance systems were defined by centralised decision-making processes that relied on the NMK top management team and the Board of Directors (see Section 8.4). The patriarchal model of governance through, which *top management administered, developed and controlled the*

functions of the NMK on behalf of a Board of Directors, was dominant in the organisation. According to Doppelt (2003, p. 231),

> Patriarchal organisations manage from the top. Those at the top are the authorities. They are in charge of thinking and decision making. Those at the bottom simply carry out directives of the executives. Power is exercised through the use of hierarchical management and supervision … Employees are seen as parts that can be exchanged for others, just as capital equipment may be upgraded, bought or sold.

"Hierarchies are killers of creativity and initiative and impede the use of employee knowledge" (Dunphy *et al*., 2003, p.193) in the context of enabling organisational learning and sustainability. Within a critical perspective, the participants and I challenged a patriarchal model of governance to offer one based on democratic values and social justice. I suggest the following possibilities for enhancing democratic forms of governance in communities of practices such as those found at the NMK (see Section 8.4.2):

- Devolving decision-making processes through creation of other centres of powers
- Improving information flows to enable informed decision-making processes
- Encouraging and motivating innovation for organisational learning and sustainability
- Building the capacity for decision making and leadership through staff development
- Using open, interactive and deliberative forums to create social learning spaces
- Empowering and involving staff at all levels in decision-making processes
- Providing an enabling environment and rotating positions of leadership (e.g. heads of departments)

Underpinning these possibilities are efforts to turn organisations into democratic *public spheres*[64] (see Sections 3.4.3 and 4.4.2). Cultivating deliberative democracy at the NMK promises more trustworthy and legitimate forms of governance based on inclusive and unconstrained dialogue. However, I am aware that democratic deliberations cannot solve all the sustainability issues in an organisation such as the NMK. Democracy and participation

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[64] I use the notion *public sphere*, following Habermas (1996) to signify social learning spaces for free exchange of opinions at the NMK in a reflexive and critical manner in the context of environmental education and sustainability.

do not have "magical effects in transforming the world into a fairer, better, and more sustainable place" (Greenwood & Levin, 2007, p. 255). They are essentially mediated by power relations, which are socially and historically constituted. This explains the focus of this study on the participant social learning contexts and in the broader Kenyan context in which these contexts were produced.

Fundamentally, achieving a *sustaining organisation*[65] is dependent upon democratic leadership and inclusive decision-making processes, which are associated with good corporate governance (Benn & Dunphy, 2007; Doppelt, 2003; Gatamah, 2004; see also Section 9.5.2). As explained earlier, the Museum in Change Programme resulted in a radical reorganisation of management structures (see also Sections 2.3.1 and 8.3.3). However, new management structures do not necessarily lead to improved leadership and decision-making processes in an organisation. This is because *corporate agents*[66] in new positions have the capabilities to either enable or constrain the emergence of organisational learning and sustainability. Doppelt (2003) identifies effective sustainability leaders with three key attributes that were reconfirmed by findings from this study (see also Sections 2.3.3 and 7.4.3, 8.4.2).

1. Having the ability to keep an organisation focused on achieving its higher mission while at the same time managing numerous streams of activity

2. Having the capability to inspire and mobilise employees and stakeholders to embrace change as an exciting opportunity to learn new things

3. Possessing an understanding of the key steps involved with guiding an organisation towards social change and the emergence of sustainability

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[65] Following Dunphy *et al.* (2003) this study applies the notion of *sustaining organisation* to refer to an organisation which fully institutionalises the tenets of all dimensions of sustainability into its structural and cultural system, and which also works actively to foster a sustaining society and environment.

[66] I use the term *corporate agents* to refer to the top NMK management team that formed the Directors Executive Committee (DEC). According to Archer (1995; see also Section 3.3.4), corporate agents such as the NMK DEC members have influence and power to either enable or constrain change in the context of sustainability. The members of the Board of Directors are also within the category of corporate agents.

Similarly to these attributes, the participants linked achieving sustainability with leaders who are visionary, charismatic, dynamic and action-oriented, communicative, inspiring, empowering, transparent and accountable (see Box 8.2). Leaders who value and can deal with pluralism and diversity in organisations develop more communicative and flexible relationships between actors for facilitating social change and the emergence of sustainability in a community of practice (Benn & Dunphy, 2007; see also Section 3.4.3).

9.3.3 Assumptions and values on communication

Data on issues of communication and information flows at the NMK confirmed that the dominant assumption on communication was *information is power and its flow should be controlled from the top* (see Section 8.21). This assumption is based on the argument that informed actors become more demanding in an organisation in terms of asking for their rights in the context of sustainability (A7). As explained in Chapter 8 (see Section 8.2.1) information secrecy was a deeply entrenched issue that required urgent collective social action to address sustainability issues at the NMK. The participants challenged this dominant assumption and explored the following social actions as possibilities for improving communication and information flows (see Section 8.2.2):

- Using a newsletter as a basic tool for communication in a community of practice
- Encouraging regular interactions between corporate and primary agents
- Increasing budgetary allocations on communication and training
- Using the Internet to hasten information flows and to minimise paper wastage
- Improving information packaging to encourage wide readership
- Cultivating deliberative democracy through the use of small and interactive forums

These possibilities offered high leverage points for enabling social change processes and the emergence of organisational learning and sustainability. Findings from this study highlight the importance of effective communication and increased information flows in a community of practice (see Section 8.2). Firstly, effective communication fosters common goals, vision, direction and commitment in enabling organisational learning and sustainability. Secondly, good communication increases productivity, brings about

cohesion, builds trust and enhances collaborative actions. Thirdly, two-way communication has the transformative potential of reducing hierarchies that constrain agential learning capabilities and creativity for innovation in the context of organisational learning and sustainability. Finally, effective communication and increased information flows in a community of practice may foster mutual understanding, diversity and responsiveness amongst actors when addressing sustainability issues.

9.3.4 Assumptions and values on human development

The findings from this research project verify that ethnicity and patronage influenced employment and promotions at the NMK (see Section 7.2.1 and 8.4.1). The dominant assumption was that *employment or promotion at the organisation required good connections in terms of similar ethnic backgrounds or other affiliations.* Ethnicity and patronage, as a basic assumption underlying the NMK, reflected the Kenyan patronage and ethnically-based political system as explained in Chapter 2 (see Sections 2.2.2 and 9.2.1). Patronage and ethnicity at workplaces negate values of social justice and equality, and increase suffering of marginalised groups. Other dominant assumptions and values at the NMK were associated with unfair distribution of resources, poor working conditions, prolonged casual employment and underutilisation of human resources. The participants and I challenged these dominant assumptions about human development and explored the following alternatives (see Sections 7.4.3 and 8.4.2):

- Transforming policies and procedures related to human development, e.g. the introduction of performance contracts and revision of schemes of service
- Improving the work environment and providing clearly defined incentives and rewards for participation in sustainability-based initiatives
- Fostering a social learning vision of justice and equality amongst actors
- Shifting from the traditional focus on rules and control system to human-based resource management

These possibilities, which are linked to improved governance systems, aim to achieve a well-motivated human resource base to contribute to heritage conservation and

environmental education processes. When an organisation is governed as a social system, people become the primary resource and not components to be manipulated to achieve success (Doppelt, 2003).

9.3.5 Assumptions and values on financial management

The basic and dominant assumption that the NMK was *a non-profit making public organisation which relied on donors and the government for funding* unconsciously influenced financial management at the organisation (see Sections 7.2 and 8.5.1). It generated a donor dependency syndrome which constrained participant learning capabilities and reflexivity to generate revenue for heritage conservation processes and other sustainability-based projects. To challenge this assumption, the participants explored alternatives such as increasing revenue generation activities and establishing consultancy services (see Section 8.5.2). They explored ways of strengthening budgeting systems and possibilities for reducing over-reliance on external funding. Developing and selling products that were branded National Museums of Kenya was one way of minimising this over-reliance. The possibility of establishing an endowment fund, operated by an independent trust, sought to put the NMK on a sound financial footing.

The next section examines ways of *knowing* the social reality of enabling organisational learning and sustainability in the NMK community of practice.

9.4   Knowing the social reality of organisational learning and sustainability

In this section I discuss findings from the third research aim, which explored ways of knowing the *social reality* of enabling organisational learning and sustainability (see Section 1.3). Habermasian theories of communicative action and deliberative democracy (see Section 3.4) which, draw on Deweyan pragmatism, provide epistemological lenses for this discussion. Deweyan pragmatism, that also provides epistemological foundations of critical action research, as applied in this study, is harmonious with the Archerian morphogenetic approach to organisational analysis (see Sections 3.3.2 and 9.2). I explained in Chapter 5 (see Section 5.3.2) that Dewey's concepts of experience, reflection, growth and democracy were central to this critical action research project (see Section 5.3.1).

Underpinning notions of critical action research, as an epistemology of change, is the assumption that ways of knowing may be conceptualised within and beyond communities of practice (Hart, 2007; see Section 5.3.1). Four interrelated dynamics – collective social action and innovation, democratic deliberations, critical reflections and reflexivity and systemic thinking – underpinned a critical action research inquiry of morphogenetic relationships through communicative interactions in the NMK community of practice (see Figure 9.2).

Figure 9.2   Exploring social change processes in a community of practice
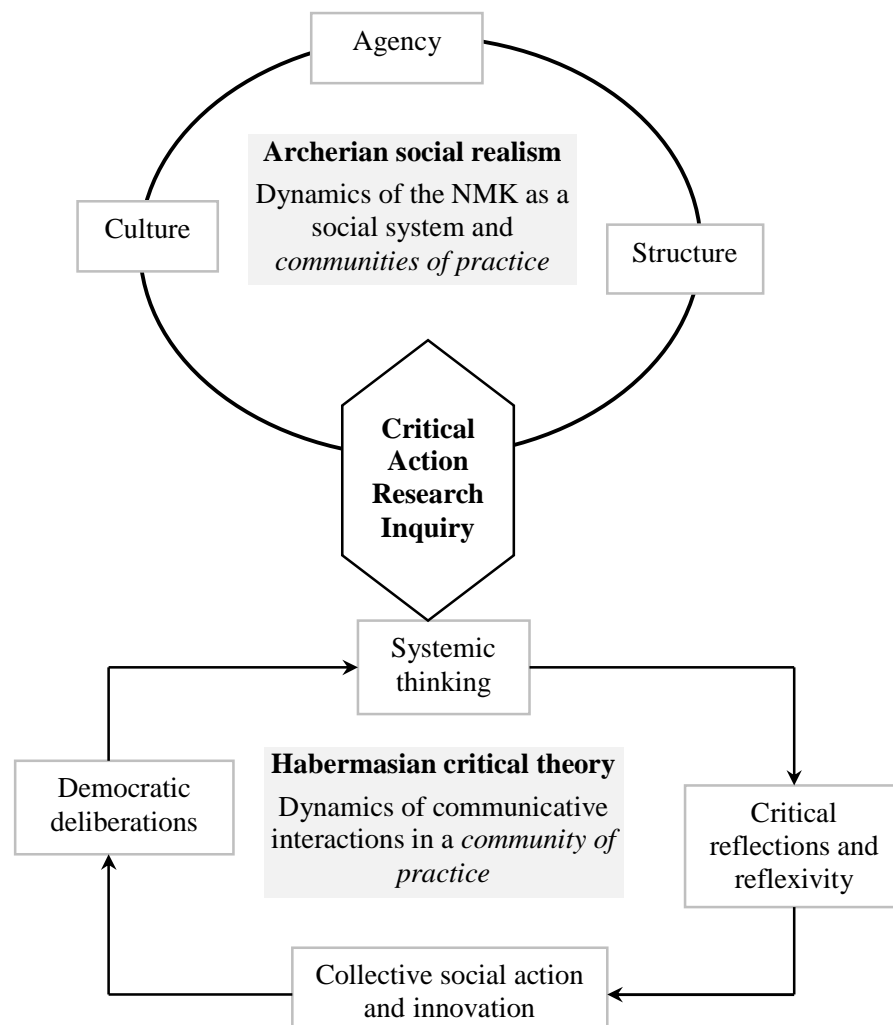

Figure 9.2 illustrates how critical action research can be applied to explore morphogenetic relationships through communicative interactions in a community of practice to deepen

context specific and systemic understanding of organisational learning and sustainability (see Section 1.1). Implementing communicative interactions in the NMK community of practice highlighted participant knowledge that was grounded in organisational and professional experiences. In the next sections, I discuss how each of the four interrelated dynamics of communicative interactions (see Figure 9.2) enhanced participant learning capabilities and reflexivity to address sustainability issues.

9.4.1 Promoting collective social action and innovation

Promoting collective social action and innovation, as ways of *knowing*, was both an evolving product and an engaging process that integrated theory and practice (see Sections 4.4.1 and 8.2.2). I involved the participants in collective processes of identifying ways of improving sustainability practices, developing action plans, acting on these plans and then reflecting on social learning outcomes, with a view to improving further social action (see 8.2.2). These iterative processes, which underpin the action research cycles, were central to knowing the social reality of enhancing the heritage conservation and environmental education processes of the NMK. The collective social actions to improve communication and information flows confirmed the creative potential and learning capabilities of the participants (see Section 8.2.2 and Table 8.2). Within a framework of communicative action, the participants challenged assumptions and values that were oriented to technical rationality (see previous discussion). In my role as the critical researcher and educator, I facilitated social action through processes that sought to develop participant learning capabilities and reflexivity to innovate for sustainability (see Sections 6.4 and 7.5.1).

Hellström (2004) believes that social action is at the heart of innovation. He views innovation as "ideating a concept or a mental object, a desired goal, and then physically acting to create and disseminate a product … into a unit of adoption" (*ibid*., p. 632). This research project associated the creative and reflexive powers of the participants with innovating for organisational learning and sustainability. It considered innovation to be any new social relations or ideas that were generated, accepted, implemented and widely used to enable heritage conservation and environmental education processes in the context of sustainability (see Section 7.5.1). Brown and Duguid (1991) consider communities of practice as suitable sites for innovation. They view learning and innovating as closely

related forms of agential activity. Engaging the participants in the critical organisational analysis of the NMK, as reported in Chapter 7, provided opportunities for *ideating* new desired goals and pathways for sustainability. For example, the participants suggested developing guidelines for volunteers, introducing water-harvesting programmes in local communities and undertaking regular staff surveys as new desired goals for enhancing sustainability (see Section 7.5.1). This confirms that engaging actors in deliberating and exploring possibilities for social change has the transformative potential for developing their learning capabilities to innovate for sustainability.

9.4.2 Enhancing democratic deliberations

Democratic deliberations, as ways of knowing, are oriented towards mutual understanding, in which members of a community of practice address sustainability issues by argument, without compromising diversity and pluralism (see Sections 3.4.2, 3.4.3 and 4.4.2). This assertion is supported by the following participant reflection on insights gained further defines what democratic deliberations entailed in the NMK community of practice:

> The importance of honest and open discussion in a team; listening and giving others a chance to express their thoughts; sharing knowledge and information; good sense of humour (A4).
> (W3 participant written reflections, 28/11/06)

In this research project I fostered "authentic deliberation" to allow for argument, rhetoric, humour, emotion, testimony, storytelling, and even gossip, during focus groups and workshops (Dryzek, 2000, p. 2). I offered social learning spaces in which participants addressed sustainability issues freely without top-down power constraints. Findings presented in Chapters 8 (see Section 8.4.3) confirm that the conditions for democratic deliberations, which I negotiated with the participants at the beginning of the study, were enhanced (see Section 6.3.3). Participant reflective comments, such as 'we have been able to … share ideas without any fears and recriminations from the management because of the way the research concept was designed' (A12), attests to this. Democratic deliberations generated insights into the complex social reality of enabling organisational learning and sustainability. They further expanded participant perspectives on social change processes, promoted tolerance and fostered understanding between the group and the NMK top

managers (see Sections 5.4.2 and 8.4.3). For this study, four conditions defined democratic deliberations for knowing the social reality of enabling organisational learning and sustainability in the NMK community of practice (see Section 8.4.3):

1. Free exchanges of information that included arguments and debates, based on respect and collaboration amongst the participants
2. Vibrant, open, honest, interactive and consultative discussions on heritage conservation processes and sustainability issues
3. Tolerance of diverse views and giving all the participants opportunities to contribute during workshops and focus groups (e.g. see Section 5.2.1)
4. Focus on social action aimed at fostering internally driven change processes

These conditions are harmonious with Habermasian theories of communicative action and deliberative democracy (see Sections 3.4.2 and 3.4.3). However, as mentioned earlier, democratic deliberations are context bound, for the participants operated within both enabling and constraining structural and cultural dynamics (see Sections 9.2.1 and 9.3.2).

9.4.3 Fostering critical reflections and reflexivity

Fostering critical reflections and reflexivity as a dynamic of communicative interactions is basic to critical action research methodology and epistemology of change (see Section 5.3). It was essential in enabling the participants to come to know themselves and their social learning contexts at the NMK (see Section 4.2.2). In Chapter 4 (see Section 4.4.3), I described critical reflection as a process in which actors consider the assumptions and values that influence their social actions in enabling organisational learning and sustainability. Conversely, reflexivity involves an interrogation of limitations to knowing the reality of social change that arises from one's social position, intellectual bias and historically constituted contexts (see Section 5.5.1). It entails sensitivity to the role of actors in exploring contextually mediated issues of sustainability in a community of practice.

Adopting a collective approach to critical reflections and reflexivity developed participant learning capabilities to know the complexities of enabling organisational learning and sustainability (see Section 8.4.3). Applying Archerian forms of reflexivity (see Sections

3.2.3 and 4.4.3), the participants and I were *communicative reflexives* since we needed each other to complete internal conversations on contextual issues related to heritage conservation processes and sustainability. We also operated as *meta reflexives* by monitoring our reflexivity (thoughts and actions) against espoused sustainability values, and by being critical towards social relations that constrained heritage conservation and environmental education processes at the NMK.

Evidence from this research project shows that reflexively challenging assumptions and values that underpin social learning contexts of actors and their broader contexts can lead to social change processes and the emergence of sustainability (see Section 9.2.3). Engaging the participants in critical reflections and reflexivity brought to the surface assumptions, ideas and social relations at the NMK, as discussed in the previous section. This required facilitation skills that included framing provoking questions easily understood by the participants and introducing complex issues in a simpler manner (Mezirow, 1990; see Section 5.4.1).

9.4.4   Strengthening systemic thinking capabilities

In Chapter 1 (see Section 1.5.6) I made a subtle distinction between *systems thinking* and *systemic thinking*, which are derivates of general systems theory (Bertalanffy, 1956; Buckley, 1967). A systems thinking perspective complements or extends a critical realist view of social reality of the emergence of sustainability in an organisation because of the relational underpinnings of both. In contrast, systemic thinking is a mode of thinking that keeps actors in touch with the wholeness of their existence in a community of practice (Flood, 2001). Developing participant learning capabilities to think systemically was a key element of communicative interactions, as critical and cyclical educational interventions (see Section 6.4 and 8.2.1). Participant reflexive comments such as 'since we are all part of the system we should not run away but rather strive to bring about change' (A2) and 'when looking at change … one is not supposed to dwell on personalities, but the systems' (A9), point to strengthened systemic thinking capabilities in the research group. Systemic thinking offered a way of knowing the complex and dynamic social changes at the NMK that resulted from the social and socio-cultural interactions highlighted in Section 9.2.2.

The critical orientation in this study acknowledges that the web of social reality in organisations is composed of too many variables to be effectively considered and addressed (Kincheloe, 2004). Engaging the participants in a critical organisational analysis provided a good starting-point for knowing the complex reality of enabling social change (see Section 7.2). Throughout the data-generation processes I encouraged the participants to think systemically, while addressing complex and seemingly unconnected sustainability issues. As revealed in this study, strengthening the systemic thinking capabilities of actors has the transformative potential of keeping them in touch with the wholeness of their existence in an organisation (e.g. see Section 7.3.1). Furthermore, actors may gain an appreciation of how social learning contexts influence their learning capabilities and reflexivity. Such an understanding may enable them to reconstruct collective identities in new and previously unexplored ways towards enabling the emergence of sustainability (see Section 8.2.2).

9.5 Implications for exploring organisational learning and sustainability

In this section of the chapter I discuss the implications of exploring organisational learning and sustainability by using a *social learning theory* that considers both morphogenetic relationships and communicative interactions in a community of practice. In Chapters 1 and 4 I explained that this study utilised the Lave and Wenger communities of practice approach, as both unit of analysis and social learning theory for exploring organisational learning and sustainability (see Sections 1.4.4 and 4.2). This approach complements the Archerian and Habermasian theoretical frameworks that respectively provided ontological and epistemological lenses for this research project. I first examine how the NMK community of practice was designed and cultivated for the purpose of organisational learning. I then discuss the emergence of organisational learning and sustainability at the NMK. This discussion emphasises both issues of *being* and *becoming* and issues of *knowing* in a community of practice. Finally, I examine how social change processes and the emergence of organisational learning and sustainability may be institutionalised.

9.5.1 *Cultivating communities of practice for organisational learning*

To promote organisational learning and sustainability, organisations such as the NMK need to conceive of themselves as communities of practice (Brown & Duguid, 1991).

Communities of practice are the basic building blocks of social learning processes in organisations (Wenger, 2000) with regard to achieving sustainability. They offer contexts for improving sustainability practices and developing agential learning capabilities and reflexivity to enable social change. Actors in organisations can simultaneously be members of several communities of practice to indicate the existence of multiple sites of learning and knowledge creation in a specific context. The research group which formed the unit of analysis in this research operated as one of the several communities of practices at the NMK. As a unit of analysis, the group enabled me to explore morphogenetic relationships and the emergence of organisational learning and sustainability (see previous sections). This group comprised fellow NMK employees who agreed, on a voluntary basis, to interact regularly and address issues related to heritage conservation processes and sustainability (see Chapters 7 and 8). The design and cultivation of the NMK community of practice involved the following four processes (see Sections 4.2.2 and 6.3.2):

1. Identification and recruitment of potential members through a democratic process that emphasised voluntary participation (see Section 6.3.2)

2. Negotiation of terms of participation based on Habermasian critical theory perspectives and social research ethical guidelines (see Section 6.3.3 and 6.7)

3. Provision of resources and facilities for meetings through the support of the NMK management with direct support from the organisation in the form of resources and time for the research meetings (see Section 8.4.2)

4. Employment of *collectivistic* research techniques that created multiple lines of communication and offered the participants a safe environment for sharing their organisational experiences (see Section 5.4) with workshops and focus groups central to cultivating the NMK community of practice (see Sections 5.4.1 and 5.4.2).

These processes strengthened the NMK community of practice as a site of organisational learning aimed at addressing sustainability issues. The community was defined by three elements – a shared domain of knowledge on heritage conservation processes, members who cared about these processes and a shared identity in the *National Museums and Heritage Act* (Government of Kenya, 2006). These elements were developed through

communicative interactions as part of developing the learning capabilities and reflexivity of the community. The design and development of the community was more about cultivating participation than the planning and organisation of the research activities. This resulted in a strong community in which I fostered communicative interactions and relationships based on mutual respect and trust (Habermas, 1984; Wenger *et al*., 2002; see also Section 3.4.2). The following reflexive remarks by a group member highlight this point:

> The [community] is really focused and committed to the research; the members are keen listeners and ready to share experiences … The group is a change mover able to convert and make new comers welcome free and ready to open up. (A1)
> (W3 participant written reflections, 28/11/06)

The participants found the research group very useful and even considered institutionalising it at the NMK for the purpose of addressing emerging sustainability issues. For example, A20 wanted the community to 'become a permanent group for change at the organisation' after this research project (FG11). The methodological and epistemological principles that underlie this study (see Sections 1.4.2, 3.4, and 5.3) support the principles that Wenger developed in his latter work with the business community on how communities of practice can be cultivated in organisations (see Wenger, *et al*., 2002; see Section 4.2.2 for details).

9.5.2 *Emergence of organisational learning sustainability*

Throughout this section of the chapter, I synthesise discussion points from the previous sections (see Sections 9.2, 9.3 and 9.4) to highlight how the Lave and Wenger communities of practice approach complemented the Archerian morphogenetic approach and Habermasian critical theory (see Section 4.2.2). Following Lave and Wenger (1991), social learning is an integral and inseparable aspect of social practice, which involves the construction of identity through changing forms of participation in communities of practice. This understanding effectively extends the exploration of morphogenetic relationships in the NMK community of practice through communicative interactions into social learning processes (see Figure 9.2). According to Elkjaer (2003), all social learning theory views learning as participation in social learning processes, emphasising both issues of *knowing* and issues of *being* and *becoming*. From this perspective, I regard organisational learning as collective, relational and social processes aimed at improving sustainability practices in an

organisation. In what follows, I illuminate both issues of *being* and *becoming* and issues of *knowing* in the context of contributing to a sustainable NMK.

Being and *becoming* a sustainable NMK

Exploring issues of *being* and *becoming* at the NMK focused on interrogating the day-to-day organisational experiences in the NMK community of practice. It involved morphogenetic thinking in which all transformative social learning processes were analysed in the three phases of conditioning, interaction and elaboration (see Sections 3.3, 3.5.1 and 9.2). This highlighted a complex social reality which was achieved through implementing communicative interactions in the NMK community of practice (see Section 7.2).

The emergence of organisational learning and sustainability in the NMK community of practice involved a deeper understanding of morphogenetic relationships through communicative interactions. Such relationships highlighted the social reality of contributing to a sustainable NMK. In this research project, a sustainable NMK is expected to implement and imbed the possibilities of social change processes, discussed in Section 9.3 into its structural and cultural domains. Furthermore, a sustainable NMK needs to work actively and collaboratively in fostering and contributing to a sustainable Kenyan environment through its heritage conservation processes (see Section 2.3.3). Based on the findings from this research project, the social reality of achieving a sustainable NMK is characterised by (see Sections 7.3.1 and 9.3):

- good communication and information flows, enhanced interpersonal relationships, democratic forms of governance and improved financial viability (see Sections 8.2.2, 8.3.2 and 8.5.2)
- a pleasant work environment characterised by high compensation levels and improved services to the public (see Section 8.4.2)
- unique, accessible, quality-oriented and dynamic heritage conservation and environmental education processes (see Section 8.6)
- a distinct identity in terms of architectural forms and displays that can foster pride in the Kenyan people (see Section 7.3.1).

This social reality of a sustainable NMK may be used to generate various interpretations that can be interrogated by researchers from other contexts to provide alternative explanatory theories in a process of *communicative validation* (Somekh, 2006; see Section 10.2.3). However, this research project generated interpretations of sustainability that were context specific (see Section 7.3.2). In the NMK community of practice, sustainability meant improved governance systems (political dimensions), being true to the NMK values and systems (social dimensions), improved and steady revenue generation (economic dimensions) and sustained heritage conservation processes (biophysical dimensions). These interpretations support the view that sustainability is best understood as a social learning process that seeks to build relationships between actors and their structural and cultural dynamics within specific organisational contexts (see Sections 4.3.1 and 7.3.2).

Knowing the social reality of a sustainable NMK

Knowing the social reality of contributing to a sustainable NMK involved developing participant learning capabilities and reflexivity to address contextual issues, as discussed in the previous section. These issues, which I regarded as an overlapping series of dynamically complex phenomena, were on communication and information flows, decision making and leadership, staff motivation and development, the role and identity of the organisation and financial management (see Chapter 8; see also Figure 9.1). This research process has confirmed that developed learning capabilities amongst members of a community of practice may contribute to an overall organisational learning capacity for the emergence of sustainability. Basically, ways of knowing the social reality of enabling sustainability considered the issue of participants coming to know about themselves, and what it meant to be part of the NMK and broader Kenyan contexts (see Sections 2.2, 2.3 and 4.2.2). Following Habermasian critical theory I applied the notion of *communicative interactions* to refer to educational interventions that were aimed at developing participant learning capabilities and reflexivity of participants. This research process advances communicative interactions as ongoing educational processes, with a view to opening up a contextual engagement with social change processes in other communities of practice. To reiterate, communicative interactions in the NMK community of practice were characterised by (see Sections 4.4 and 9.4):

1. promotion of collective social action and innovation for sustainability

2. enhancement of democratic deliberations that fostered argument, debate, pluralism and diversity in addressing sustainability issues

3. fostering of critical reflections and reflexivity in the community

4. strengthening of systemic thinking capabilities of the participants

These dynamics were aimed at fostering social justice, democracy and participation in the NMK community of practice. I implemented them on the premise that organisational learning capability to address sustainability issues is developed through engaging actors in critically reflexive, deliberative, action-oriented, and innovative and systemic environmental education processes. However, the four dynamics need to be considered beyond a Habermasian linguistic framework of mutual understanding. This is because agential learning capabilities and reflexivity to address sustainability issues are not only based on linguistic competencies of actors (see also Archer, 2003). They are also shaped by the violation of identity claims acquired in socialisation (Honneth, 1999; see Section 5.2.4).

Reorienting the communicative perspective from a Habermasian mutual understanding to Honneth's conception of the conditions of recognition, can provide a deeper understanding of formation of identities, norms and values as sustainability change at the NMK (see Section 5.2.4). Honneth distinguishes three forms of social recognition that underpin formation of identity in a community of practice as emotional concern in social relationships, rights-based recognition and social esteem for agential capabilities. This theory aims to connect with the agential experiences of shame, anger and resentment that were typical of violations of social justice and democracy at the NMK (see Section 8.4.1).

9.5.3 Institutionalising social change processes and sustainability

> Many an innovation brought in with great fanfare is superficially accepted, and months or years later, things have drifted back to the way they were before. Nobody may have openly resisted the change. Nobody revoked it. It just didn't last.
> (Source unknown, quoted in Eiseman *et al*., 1990, p. 24)

This illustrates the importance of institutionalisation in any social change process. Although this research project resulted in a deeper understanding of the social reality of

contributing to a sustainable NMK, its timeframe did not allow for an in-depth exploration into the institutionalisation of social change processes (see Section 6.5 and 8.7). Nonetheless, the participants identified elements useful for institutionalising social change processes and the emergence of sustainability at the NMK. I identified these elements, in Chapter 8, as branding, creating democratic forums, addressing fears of social change and developing organisational learning capacity on a continuous basis (see Section 8.7.2). In the context of this study, institutionalisation refers to the process by which social change processes and the emergence of sustainability become embedded in the structural and cultural domains of an organisation. The three broad cycles of inquiry discussed in Chapter 6 may be used to create a context for developing clarity regarding this understanding (see Sections 6.3, 6.4, 6.5 and 8.7).

1. The first cycle or phase of the study entailed *initiating* the action research project and identifying contextual issues related to organisational learning and sustainability (see Section 6.3). In this cycle primary agents at the NMK regrouped into corporate agents to form a community of practice. The community identified structural and cultural factors that influenced their agency to enable heritage conservation and environmental education process in the context of sustainability (see Sections 7.2 and 9.2.1).

2. The second cycle or phase involved *implementing* organisational learning and sustainability through communicative interactions (see Section 6.4). Participant learning capabilities and reflexivity were developed to address sustainability issues.

3. The third and final action research cycle explored the *institutionalisation* of social change processes and the emergence of sustainability (see Section 6.5). The participants reflected on the entire research project with a view to embedding new ideas, values and social relations in the NMK structural and cultural systems (see Section 8.7).

From the factors outlined above, I can argue that fostering and contributing to a sustainable NMK involves three phases of initiation, implementation and institutionalisation of organisational learning through cultivated communities of practice. Based on the findings presented in Chapter 8 (see Section 8.7; see also Eiseman *et al.*, 1990) I suggest the

following for institutionalising social change processes towards fostering a sustainable NMK in the context of heritage conservation and environmental education:

- *Acceptance of new ideas, values and social relations*
  Most of the new ideas, values and social relations generated in this study are yet to be fully accepted at the NMK due to systemic strains (see Sections 9.2 and 9.3).

- *Stable and regular implementation of new ideas and innovations for sustainability*
  The participants acknowledged that the NMK was 'very good at putting forward new ideas but, poor at implementing them' (A12; see Section 7.4.3). This constrained stable and regular implementation of new ideas and social relations. Furthermore, there was no widespread use of the few innovations (e.g. water harvesting) generated at the organisation (see Section 7.5.1).

- *Firm expectations of the emergence of sustainability*
  Developing 'internal mechanisms that can convert challenges into opportunities' (A6) and addressing fears of change can provide firm expectations of the emergence of sustainability at the NMK (see Sections 7.4.3 and 8.7.2).

- *Continuous development of collective learning capabilities*
  Continuously developing individual and collective learning capabilities for sustainability is vital to the institutionalisation process, since it may contribute to relational and social change processes at NMK (see Section 8.7.2).

- *Budgetary allocations to support sustainability initiatives*
  Generally, the NMK made low budgetary allocations to heritage conservation and environmental education processes (see Sections 8.5.1 and 9.2.1). If strengthened through budgetary allocations, the existing Environmental Health and Safety Committee could play a more active role in sustainability initiatives at the NMK (A6).

These processes illustrate that exploring morphogenetic relationships through communicative interactions in the NMK community of practice provided useful opportunities for initiating, implementing and institutionalising organisational learning and sustainability. However, some of the contextual factors identified in Part 2 of this thesis (see also Section 9.2.1) constrained institutionalisation processes that could contribute to a

sustainable NMK. The interrelationships of assumptions and values underlying the NMK, as illustrated in Figure 9.1 also influenced the institutionalisation of morphogenetic processes and the emergence of sustainability.

9.6   Summary

In this chapter I discussed findings from the study within the philosophical and theoretical frameworks, research aims and philosophical questions introduced in Chapter 1. To highlight the agential, structural and cultural dynamics that operated at the NMK, I have discussed the findings from the first aim of the research within an Archerian morphogenetic approach. I also examined the findings from the second research aim on the critical reviews of assumptions and values that defined the NMK as an emergent stratum of social reality. The interrelationships between these assumptions and values were discussed as contextually mediated themes of governance, communication, the identity and role of the NMK, staff and human development and financial management. The chapter highlighted ways of knowing the social reality of enabling organisational learning and sustainability in the NMK community of practice using a lens from Habermasian critical theory. Four dynamics of communicative interactions on collective social action and innovation, critical reflections and reflexivity, democratic deliberations and systemic thinking underpinned ways of knowing this social reality. Utilising the Lave and Wenger community of practice concepts, I discussed the implications of exploring organisational learning and sustainability at the NMK. The chapter highlighted both issues of *being* and *becoming* and issues of *knowing* in the context of enabling a sustainable NMK.

In the next and final chapter, I offer reflections, contributions and recommendations based on the findings reported in Chapters 7 and 8, and the discussion presented in this chapter.

Chapter 10   Reflections, Contributions and Recommendations

10.1   Introduction

As anticipated in Chapter 1, this critical action research project has deepened understandings of ontological, epistemological and pedagogical implications of exploring organisational learning and sustainability in a Kenyan context. In nine chapters, structured into five distinct but interrelated parts, I presented how this goal was achieved. In Part 1 I presented the introduction and the shaping contextual influences of the study (Chapters 1 and 2). Through Part 2 I offered the theoretical foundations of the study (Chapters 3 and 4) and in Part 3 (Chapters 5 and 6) I discussed the methodology and research processes. I reported the research findings as contextual issues and social learning outcomes in Part 4 (Chapters 7 and 8), which were discussed in Part 5 by examining the ontological, epistemological and pedagogical implications of the study (Chapter 9). In this final chapter, I synthesise reflections, contributions and recommendations from the entire study. I begin the chapter by making reflections on the research process at two levels – the *core* action research project and *thesis* action research project (see Section 6.2.3). I then share the contributions of the study within the philosophical and theoretical frameworks introduced in Chapter 1. Finally, I offer recommendations on further social changes at the NMK, and directions for future environmental education research on organisational learning and sustainability.

10.2   Reflections on the research process

Undertaking a critical action research study in and on my own organisation was an opportunistic and complex process. It was complex because the research process required reviewing and critiquing assumptions and values in the NMK social system, of which I was part (see Section 9.3). Selecting to explore social change processes in the context of sustainability, which were already taking place within the *museum in change* framework, was an opportunistic process (see Section 2.3.2). Following Perry and Zuber-Skerritt (1992) I implemented this study as two distinct but integrally intertwined projects, the *core* action research project and the *thesis* action research project (see Section 6.2.3; see also

Figure 6.1). The thematic concern for the core project was to improve heritage conservation and environmental education processes of the NMK in the context of sustainability. The thesis action research project addressed intellectual propositional knowledge on the exploration of organisational learning and sustainability in the NMK community of practice. Making this distinction was important since my roles as a *complete member* (an employee) of the NMK and critical action researcher were different. The findings reported in Part 4 and the three broad cycles described in Chapter 6 constituted both the core and thesis projects. In the next sections I offer reflections on the two distinct but intertwined projects.

10.2.1 Core action research project

The *core* action research project was collaborative and participative and provided opportunities for investigating social change processes at the NMK with a group of 23 fellow employees (see Appendix 1, p. 396). This group, the members of which were drawn from different departments, was cultivated into a community of practice for organisational learning purposes (see Sections 4.2.2 and 9.5.1). As members of the NMK community of practice, we were connected by a shared domain of knowledge on heritage conservation processes and a passion to improve organisational learning and sustainability practices as middle-level managers. I involved the participants in the data generation, analysis and interpretation and iterative cycles of action research, as part of social learning processes to improve organisational learning and sustainability (see Chapter 6). Findings from the core action research project were made public at the NMK through focus group summaries, workshop reports and stage (broad cycle) reports (see Section 6.6.2; see also Appendix 8, pp. 411-412).

Collaborative research processes were undertaken within the framework of the Museum in Change Programme to examine holistic and systemic social changes processes at the NMK. We explored complex and dynamic sustainability issues that related to the relationships between us and the NMK within a historically constituted broader Kenyan context (see Chapter 8). This process generated ideas, values and social relations for improving the heritage conservation and environmental education processes of the NMK (see Sections 9.2.3, 9.3 and 9.5.2). Drawing the participants from different departments created

opportunities for argument, debate, diversity and pluralism during communicative interactions (see Sections 8.4.3 and 9.4.2). Through workshops we held dialogue with the top NMK management team, which developed our agency to address sustainability issues related to the heritage conservation and environmental education processes of the NMK (see Appendix 2, p. 399).

Judging from the sustained participation of the participants, and the generation of social learning outcomes from collaborative research activities within the three broad cycles reported in Chapter 6 (see Section 6.3, 6.4 and 6.5), I can conclude that the core action research project was relatively successful, given the constraints of the situation. As C5, the NMK Legal Officer, remarked, the research was 'so timely in the respect that we are going through some change and our slogan is *the museum in change* … Everyone has got to change'. Whereas the participants identified contextual issues for exploration in the first broad cycle, they deliberated and acted on these issues during the second and third cycles of inquiry, by positioning them into the broader Kenyan context. Through these cycles, the study built a momentum for improving heritage conservation and environmental education processes of the NMK in the context of sustainability. The cycles were integral to communicative interactions, which I implemented as educational interventions for developing agency in the NMK community of practice. In the next section, I reflect on my role in the thesis action research project.

10.2.2   Thesis action research project

The thesis action research project addressed intellectual propositional knowledge on the exploration of organisational learning and sustainability in the NMK community of practice. It constituted my independent work and contribution to a body of knowledge on organisational learning and sustainability as a doctoral student. As the critical action researcher, I had a distinct role and responsibility for ensuring validity and rigour (see Section 5.5), in-depth data interpretation, thesis writing processes (see Section 6.6.3) and the dissemination of findings to the international research community (e.g. Atiti, 2007b). However, I did not use this privileged position to influence communicative interactions during the core action research process. I sought to encourage the expression and development of diverse views within the research group during our communicative

interactions, as highlighted in Section 9.3.2. I regarded all the research participants as change agents with reflexive powers to influence heritage conservation processes of the NMK in the context of sustainability. Communicative interactions surfaced participant knowledge on heritage conservation processes and developed agency for addressing sustainability issues (see Section 9.4). This knowledge was situated and grounded in the organisational and professional experiences of the participants.

To address intellectual propositional knowledge on the exploration of organisational learning and sustainability in a specific community of practice, the thesis project was conducted within a complex philosophical framework that brought together assumptions, from Archerian social realism, Deweyan pragmatism and critical theory (see Figure 1.1). I drew on theoretical perspectives from the Archerian morphogenetic approach, Habermasian critical theory and the Lave and Wenger communities of practice approach (Part 2). I sought the support of peers and academic supervisors in working with these theoretical frameworks. The following journal reflection confirms this statement:

> JL told me that it requires five months to get a theoretical footing. I now believe him. But for now, the tensions between Archer and Habermas are now clearing. I am bound to come up with a very comprehensive theoretical foundation for the study.
> (Journal reflection, 28/07/07)

Drawing on these philosophical and theoretical frameworks enabled me to overcome the difficulties associated with *seeing* organisations, and *observing* them learn. Making explicit the ontological and epistemological perspectives for the study was useful for avoiding the pitfalls of committing epistemic fallacy, in which assertions of *being* are reduced to those of *knowing*. Working with different theories in the thesis project was based on the assertion that a complex and dynamic social reality, such as the one I found at the NMK, cannot be investigated adequately within the framework of a single theory (see Section 3.2.1). A single theory would have provided only partial explanations of social change processes and the emergence of sustainability. Through this research process, I promote the view that harmonious aspects of different and competing social theories can be integrated and used in one study (Child, 1997). Such a view has the potential of opening up possibilities for theoretical development in the exploration of organisational learning and sustainability in

other contexts. See Lupele (2007) and Shava (2008) for other examples of how such an approach to working with theory has been used to generate new insights into African contextual realities in environmental education research.

Critical action research enabled me to explore the "multidimensionality and complexity" (Greenwood & Levin, 2007, p. 53) of enabling organisational learning and sustainability. The three broad and overlapping cycles of inquiry explained in Chapter 6 (see Figure 6.1), presented opportunities for generating context specific knowledge on organisational learning and sustainability. The findings offered in Part 2 of this report confirm that I implemented the thesis action research project and achieved the aims outlined in Chapter 1 with some success. However, since the participants and I were woven together in the complex and dynamic Kenyan context, it required continuous social learning processes in the NMK community of practice to realise the emergence and partially successful institutionalisation of sustainability (see Section 8.7.2). In the next section I highlight some of the limitations of this study and how they were addressed.

10.2.3 Limitations

The findings from this research project are associated with the limitations of using one case study (see Section 6.2.2). If the *case* is poorly investigated, it may end up being a case of lost potential. However, the NMK *case* did not become a lost potential judging from the findings offered in this report, and the morphogenetic outcomes reported on. The study was designed as educative with more emphasis on generating context specific understanding of organisational learning, as opposed to producing generalisable findings. However, this does not mean that no generalisation is possible. As Arksey and Knight (1999, p. 58) observe "the general is always present in the particular". I encourage the readers to identify insights that would be relevant to their own organisational contexts. Through "interpersonal mediation and negotiation" (Somekh, 2006, p. 30) or what Altrichter *et al.* (1993; quoted in Somekh, 2006, p. 30), describe as *communicative validation*, readers can interrogate the findings of this research project with a view to providing alternative explanatory theories.

As in any other critical action research project, I was faced with the limitation of responding to issues about rigour and quality of the findings (see Section 5.5). Unlike

traditional research, where rigour is based on established routines for ensuring quality, I found no specific criteria for critical action research in the literature. I addressed this limitation by using reflexivity and criteria associated with *validity* and *trustworthiness* to enhance the quality of the findings (see Sections 5.5.1, 5.5.2 and 6.6.2; see also Greenwood & Levin, 2007). Another limitation arose from my *pre-understanding* of the NMK context. By pre-understanding I refer to the knowledge, insights and experience I had about the NMK prior to this study (Gummeson, 2005). Although this pre-understanding was an enabling factor, it posed challenges when it came to reviewing and critiquing basic assumptions and values in a social system of which I was a part (see Sections 6.2.3 and 9.3). According to Elliot (1991, p. 48),

> The major problem any cultural [change] 'from within' faces is the failure of the [researchers] to free themselves from the fundamental beliefs and values embedded in the culture they want to change. Cultural [changes] often fail to realise their radical possibilities by carrying forward too many of the basic assumptions of the 'older order'.

Making reflexivity an integral part of the research process freed me (at least partially) from the dominant assumptions and values that were embedded in the NMK cultural system (see Section 5.5.1; see Figure 9.1) to allow for meta reflexion on the process. Following Bourdieu (2004), I *objectified* my own position and those of the participants, defamiliarised my views on the social reality of change and documented what the participants *objectively* identified as sustainability issues. I encourage other researchers to practice this form of epistemological vigilance by interrogating their social positions, intellectual biases and research contexts. Practising a form of epistemological vigilance ensured this research project was not located only in my person theoretical views positions, but in a broader knowledge base after the Archerian social realism, which recognises the existence of knowledge accumulated over time in society.

This research sought to develop participant learning capabilities and reflexivity to address sustainability issues at the NMK. However, the short span of the data generation phase was another limitation. The 14-month data-generation period was not enough to cultivate the NMK community of practice for continuous organisational learning purposes (see Section 6.3.2). Although I managed to create conditions for democratic deliberations during focus

groups and workshops (see Sections 5.4.1 and 6.3.2), I cannot claim to have created the same conditions outside these arenas. This is because a considerable amount of time is required to generate long-lasting social learning processes in a community of practice. In the next section, I share the contributions of the study as anticipated in Chapter 1.

10.3   Contributions and implications of the study

In this section I share contributions and implications of this research project in the context of environmental education processes and sustainability. Although exploratory in nature, the study has enabled me to establish the central thesis that exploring morphogenetic relationships, through communicative interactions in a community of practice, can deepen context specific understanding of organisational learning and sustainability (see Section 1.1). I developed this thesis within a complex philosophical framework, which brought together assumptions from Archerian social realism, Deweyan pragmatism and critical theory (see Table 10.1; see also Figure 1.1).

Table 10.1   Philosophical and theoretical implications of the research

Philosophical basis	Underpinning perspectives	Emerging contributions and implications
Ontological	• Archerian social realism • Archerian morphogenetic approach	Undertaking a collaborative critical organisational analysis of the NMK generated a deep understanding of the social reality of enabling organisational learning and sustainability. This understanding is characterised by morphogenetic thinking in which social change processes are analysed in the three phases of conditioning, interaction and elaboration (see Section 9.2.1).
Epistemological	• Deweyan pragmatism • Habermasian critical theory	Implementing communicative interactions as educational interventions developed participant learning capabilities and reflexivity to address sustainability issues. Communicative interactions were characterised by four dynamics of collective social action and innovation, democratic deliberations, critical reflections and reflexivity and systemic thinking (see Section 9.4).
Methodological	• Critical orientation • Critical action research	Critically reviewing and challenging dominant assumptions, values and power relations generated possibilities for social justice, participation and democracy (see Section 9.3) and morphogenesis (including double morphogenesis). Three broad action research cycles that echoed the Archerian morphogenetic cycles generated

		social learning outcomes (see Sections 6.3, 6.4 and 6.5).
Pedagogical	• Community of practice • Social learning theory	Applying the Lave and Wenger communities of practice approach, provided both a unit of analysis and social learning theory for analysing morphogenetic processes that resulted from communicative interactions (see Section 9.5). A community of practice, which was cultivated at the NMK for the purposes of organisational learning produced insights and interpretations of the meaning of sustainability and what a sustainable NMK signified (see Section 9.5.2).

Table 10.1 summarises the contributions of the study on the basis of the philosophical and theoretical frameworks which informed this research project (see also Section 1.4). By utilising insights from these frameworks, the study has contributed to a greater theoretical synthesis for exploring organisational learning and sustainability in a specific community of practice. It has deepened a contextual understanding of the ontological, epistemological and pedagogical implications of exploring organisational learning and sustainability using critical action research methodology, as expanded on in the next sections.

10.3.1 Ontological implications

Ontology refers to a theory of being, which influences how organisational learning and sustainability may be perceived in the context of environmental education processes. Through this research, I have confirmed that the way researchers conceive social reality influences the ways of knowing that reality and how it can be investigated (see Section 1.4). The ontological perspective that I adopted has influenced the theories which I have constructed in this study. I investigated the ontological question based upon philosophical assumptions of critical realism philosophical (see Section 1.4.1). I was particularly inspired by *Archerian social realism* which is defined by the principles of emergence and analytical dualism (see Sections 3.3 and 9.2). Archerian social realism does not take agency for granted, but rather engages its extension. Its emancipatory intent is based on the assertion that structures are transformable through the intentional exercise of human agency.

The Archerian morphogenetic approach provided a robust theory of social change, which simultaneously explained how structure or culture and agency were linked at levels of analysis, and how social change was produced at the NMK. It also defined aspects of morphogenetic and morphostatic processes in terms of enabling sustainability, and an

inclusion of time as a key factor in change (see Sections 3.3 and 9.2). Within this framing, I conclude that understanding the interactions between agency, structure and culture without conflating them, is basic to enabling the emergence of organisational learning and sustainability in a community of practice. In this research project, I applied the notion of *morphogenetic relationships* to refer to these interactions. This view challenges strategic choice theory, which is probably the dominant theory of strategy and organisational change, for its false assumptions of conflation and voluntarism (see section 3.2.1). A voluntaristic approach to organisational change, which prevailed within the Museum in Change Programme, relies too heavily on rationality and fails to take account of other causal factors that shape social change and agency.

This research project joins the growing number of critical realist inspired studies within the field of environmental education (e.g. Lotz-Sisitka, 2008; Lupele, 2007; Shava, 2008). Based on the findings, I can confirm that understanding the social reality of enabling organisational learning and sustainability is characterised by morphogenetic thinking, where all social change processes are analysed in the three phases of conditioning, interaction and elaboration (see Section 9.2). This has the transformative potential of developing agential learning capabilities and reflexivity for social change (morphogenesis and double morphogenesis) in the context of environmental education processes and sustainability. In the next section, I consider the epistemological contributions and implications of the study.

10.3.2 *Epistemological implications*

Established as ways of knowing, epistemological perspectives embody how researchers view social reality and draw conclusions about truth, knowledge and authority (see Section 1.4.2). Ways of knowing the social reality of enabling organisational learning and sustainability at the NMK incorporated participant understanding of their social learning contexts. This argument is based on *Deweyan pragmatism* that focuses on the actions, situations and consequences of an inquiry. Habermasian theories of communicative action and deliberative democracy provided epistemological perspectives for the study. My epistemological stance was inevitably influenced by the ontological position I took based on Archerian social realism. Both Archer and Habermas draw on pragmatism and have

been inspired by the philosophy of Karl Popper (1979; see Section 3.4). They are committed to emancipatory projects which involve developing agential learning capabilities and reflexivity to address social change. I have applied the notion of *communicative interactions* to refer to environmental education processes that are aimed at developing agency in a community of practice.

In communicative interactions, social learning goals of sustainability are jointly decided on through reflexive deliberations that recognise democratic principles and respect for all actors in a community of practice (Habermas, 1984; see Section 3.4). All processes of knowing the social reality of enabling sustainability were subjected to a simultaneous *critique* of the NMK social systems and envisioning of new possibilities. Essentially, I have understood the process of critique as an ongoing one, since social change processes and the emergence of sustainability in a community of practice are not static or complete conditions. This process is connected with the emancipatory goals of both critical theory and critical realist projects. Critical organisational analysis of the NMK illuminated the different and complex ways in which power relations influenced participant learning capabilities and reflexivity to address sustainability issues (see Section 7.4.2). In this study, challenging top-down power relations sought to improve heritage conservation and environmental education processes of the NMK in the context of sustainability. Implementing communicative interactions in the NMK community of practice promoted collective social action and innovation, fostered critical reflections and reflexivity, enhanced democratic deliberations and strengthened the systemic thinking capabilities of the members. However, communicative interactions were not a one-off process that was externally planned and implemented strategically as in top-down approaches to environmental education processes.

Through this research project I advance *communicative interactions* as critical, contextual, reflexive, open-ended and ongoing environmental education processes, developing agential learning capabilities and reflexivity for enabling social change in the context of organisational learning and sustainability. The four interrelated dynamics of communicative interactions highlighted in the study reflect epistemological and

methodological principles of critical action research. In the next section I indicate the methodological contributions of the study.

10.3.3 Methodological implications

The philosophical framework within which I designed and implemented organisational learning and sustainability was influenced by the Archerian social realism and Deweyan pragmatism approaches (see Section 1.4.3). In other words, methodology is influenced by the ontological and epistemological assumptions researchers adopt in their research projects. I located this study within a critical orientation that entails a commitment to socially transformative research in organisations. Basically, I drew on the philosophical assumptions of critical theory and action research to apply a *critical action research methodology* for exploring organisational learning and sustainability at the NMK. Action research is grounded in a pragmatist epistemology and is consistent with the general systems theory which informs the Archerian morphogenetic approach to organisational analysis (see Section 5.3.1).

A critical action research methodology made it possible to integrate action, research and participation in the NMK community of practice. It allowed me to position this inquiry within the broader Kenyan context and to promote different ways of knowing amongst the participants. Through this research project, I have demonstrated that critical action research can be used as a method of inquiry to access ways of knowing through cyclical processes of planning, action and reflection. At the same time, I have shown that critical action research can be used as an epistemology of change to facilitate social learning processes in a community of practice. I therefore extend the use of critical action research as a dynamic, flexible, multidisciplinary, contextual and holistic research method and the epistemology of change for exploring organisational learning and sustainability in communities of practice. Critical action research offers a coherent methodological framework for accessing the multidimensional and complex social reality of addressing sustainability issues. In the next section I examine the pedagogical implications of the exploration of organisational learning and sustainability.

10.3.4 Pedagogical implications

I applied the concept of pedagogy as a form of political, moral and social production that occurs beyond schooling (Giroux, 1988; see Section 1.5.2). Pedagogy describes the interaction processes that I engaged with in facilitating the activities of the NMK community of practice in the context of sustainability. Critical pedagogy and critical action research, which formed the basis of communicative interactions as educational interventions in the NMK community of practice, are grounded in a social learning vision of justice and equality. The findings from this research reveal that communicative interactions at the NMK were political processes committed to improving heritage conservation and environmental education processes in the context of sustainability (see Section 9.3). As a basis for social learning processes, communicative interactions are thus useful in the generation of knowledge, the construction of identity and the learning of relations, ideas and values that contribute to sustainability in organisations. They are also useful for strengthening reflexivity and enabling morphogenesis of agency. I applied Lave and Wenger's communities of practice as a conceptual framework for analysing and facilitating social learning processes that were aimed at fostering and contributing to a sustainable NMK (see Section 9.5.2). Contributing to a sustainable NMK involved three phases of *initiation*, *implementation* and *institutionalisation* of organisational learning and sustainability through a cultivated community of practice.

From this research project, I can conclude that a strong relationship existed between what I wanted to achieve at the NMK through this research process (pedagogical values) and the ontological, epistemological and methodological assumptions that I adopted. Exploring organisational learning and sustainability as social learning processes in the NMK community of practice highlighted, for me, this relationship. Following this study, I consider organisational learning and sustainability as ongoing social learning processes that seek to transform agential, structural and cultural dynamics in an organisation (see Sections 4.2.2 and 9.5). This perspective of social learning theory incorporates morphogenetic relationships and communicative interactions to emphasise both issues of *being* and *becoming*, and issues of *knowing* a sustainable organisation (see Section 9.5.1). In order to contribute to a sustainable world, I recommend that environmental educators and

researchers cultivate communities of practice for the purposes of organisational learning and the emergence of sustainability in their contexts.

Exploring organisational learning and sustainability based on a social learning theory addressed the limitations of using behavioural and cognitive theories of learning. Cognitive theories of learning overlook the existence of knowledge accumulated over time in society. They downplay the role of learning as an integral feature of working with others in historically constituted contexts (Lave & Wenger, 1991). Moreover, organisational learning and sustainability, based on cognitive theories, may lead to an epistemic fallacy in which the issues of *being* and *becoming* are reduced to that of *knowing*. In general, exploring organisational learning and sustainability, as mutually reciprocal aspects of social learning, generated a deeper understanding of the morphogenetic processes at the NMK than would have been generated by only explored one area. This exploration has contributed to the emerging body of literature on social learning theories within the field of environmental education (e.g. Wals, 2007b). The next section offers key recommendations for further social change processes at the NMK and future research in the field of environmental education.

10.4   Key Recommendations

In this section I offer recommendations from the study within the distinctions made earlier between the core and thesis research projects. At the core action research project level, I suggest further organisational changes for implementation at the NMK. At the thesis action research project level, I recommend further research based on the theoretical and empirical insights from the study. The recommendations are aimed at generating dialogue amongst researchers and practitioners within the field of environmental education

10.4.1 Implementing further social changes at the NMK

As reported in Chapter 6, I used Focus Group 16 and Workshop 4 to engage the participants in critically reviewing and reconfirming key social learning outcomes from the study (see Section 6.5.2). The participants also made key recommendations to further improve the heritage conservation and environmental education processes of the NMK (see

also Section 7.4.5). I offer these recommendations within the five interlocking themes developed in this study (see Figure 9.1).

- *Improving the identity and role of the NMK*

  To further improve the identity and role of the NMK in heritage conservation and environmental education, the participants suggested that research and public programmes should be more focused on addressing sustainability issues such as poverty in local communities. The organisation should provide consultancy services in heritage conservation for local communities as a corporate social responsibility programme. However, this will require developing clear policy guidelines on collaborative linkages with local communities. Further engagement of the regional museums in eco-tourism activities may improve the identity and the role of the NMK in heritage conservation processes.

- *Minimising hegemonic influences in donor funded projects*

  To minimise dominant power relations in donor-funded projects (e.g. see Section 7.4.2), the NMK should strive to enter into clearly defined collaborative funding partnerships, as opposed to donor-recipient relationships. Budgeting procedures and operations at the organisation should be institutionalised to ease decision-making processes related to economic dimensions of sustainability.

- *Cultivating democratic governance systems*

  To enhance collective and inclusive decision-making processes NMK, the participants recommended the incorporation of heads of departments into the Directors Executive Committee. As a form of cultivating deliberative democracy, committees need to be empowered to implement their recommendations. More social changes are required to create democratic spaces for the staff to express their views without the constraints of top-down power relationships. This calls for further cultivation of communities of practice at the NMK.

- *Developing a well-motivated human resource base*

  To further develop a well-motivated human resource base, it was recommended that systems of rewards and appreciation of staff need to be developed and

institutionalised. The existing committee on human development should be proactive and evaluate training outputs at the organisation.

- *Improving communication and information flows*
  The participants recommended the formulation of an internal communication policy to improve information flows at the NMK. Such a policy is to articulate ways of promoting values, ideas and beliefs that are consistent with heritage conservation and environmental education processes in the context of achieving sustainability.

In the next section I recommend further research on organisational learning and sustainability within the field of environmental education.

10.4.2 Further research

Several directions and themes for further environmental education research emerge from this study. Firstly, this exploratory research project suggests embracing interdisciplinary approaches and pluralism in environmental education research. The elements of this pluralism entail an even stronger engagement with different philosophies and fields (e.g. environmental education and management studies). I recommend that environmental education researchers extend themselves beyond the boundaries of their own fields and philosophical orientations. A commitment to pluralism and interdisciplinary research, in the context of environmental education, may extend the scope of our knowledge base, and at the same time enhance our leverage in the ever-changing world of practice. Secondly, although the process of institutionalising social change processes is critical to fostering and contributing to sustainability in organisations, given its short duration this study did not give this process attention commensurate with its importance. An engagement with the environmental education and sustainability body of literature has revealed little research within the area of institutionalisation. I therefore, recommend further research into how to institutionalise social change processes and the emergence of sustainability in organisational-based communities of practice. Thirdly, given the role of critical action research in enabling social change processes I recommend further research in the under-researched area of action research epistemology of change. Fourthly, there is a need to refocus on the role of critical realism in sustainability change. This demands more

exploration of multiple levels of organisational analysis and reciprocal study of how knowledge, generated across communities of practice, may be translated into enhanced collective learning capabilities for the emergence of sustainability in organisations. Finally, this research project has demonstrated the role of communities of practice as social learning contexts. I recommend further research in the context of environmental education and sustainability on how they may be cultivated and institutionalised for the purposes of organisational learning.

10.5   Concluding remarks

This chapter has offered reflections, contributions and recommendations on exploring organisational learning and sustainability using critical action research within a specific context. The distinctive contribution of this study is in its employment of a coherent and complex philosophical and theoretical framework for exploring organisational learning and sustainability. It offers conceptual lenses for exploring organisational learning and sustainability that straddle boundaries between disciplines and between social theories and practices. The research has shown that working with Archerian social realism and Deweyan pragmatism within a critical action research methodology has much to offer in deepening an understanding of organisational learning and sustainability in a specific context. I hope that findings from this study will motivate other environmental education researchers and practitioners to use a similar philosophical framework. This is because achieving sustainability in organisations and society requires a multidisciplinary approach that traverses fields. It involves seeking out the productive relations between historically constituted knowledge fields, as a response to challenging and complex environmental issues and risks. I anticipate that the findings will generate discursive resources with which to further critically reflect on how to contribute to organisational learning and sustainability in an ever-changing world. Undertaking the research in and on my organisation was a challenging and tumultuous journey. However, I do encourage others to take a similar route with a view to transforming basic assumptions, values and dominant social relations that cause systemic contradictions in their own organisational contexts. This research project has provided an empirically and theoretically informed argument for enabling social change processes as part of the solution to contributing to a sustainable world. It is an invitation to

the readers to be part of the future solution – *being* and *becoming* responsible, critical and deliberative *agents* of creative change and contributing to the emergence of sustainability in their own social learning contexts.

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Appendices

Appendix 1 – Members of the NMK community of practice

This list follows the order of recruitment, that is, when a member signed the information and consent form shown in Appendix 6. The participants constituted the NMK community of practice which formed the unit of analysis in this research project.

Member (pseudonym)	Department	Position in organisation and professional interests	Attendance (No. meetings out of 20)
A1	Invertebrate Zoology	A long serving NMK employee and Senior Research Scientist who was undertaking his doctoral studies. A member of the Anti-corruption committee at the NMK. A very critical, articulate and active participant.	17
A2	Herpetology	A research scientist and a member of the Young Researchers Forum at the NMK. Actively participated in the research process.	15
A3	Botanic Garden	Research scientist at the Nairobi Botanic Garden and was actively involved in promoting ecological sustainability practices such as the use of organic manure in gardening. Had participated before in an action research study in which the NMK supported two schools to develop their grounds for environmental learning. Left the NMK for another job before the end of this study.	9
A4	Public Relations	Head of Public Relations and Marketing Department with expertise on organisation learning and change. A4 was chosen to be the team leader of the group and actively participated in the Museum in Change processes on aspects of communication.	11
A5	Botanic Garden	A forester by educational background, A5 was involved in addressing plant sustainability issues through botanic garden education. He helped in taking notes during focus groups sessions and actively participated in the research process.	17
A6	Phytochemistry	Head of Phytochemistry Department and Chair to the Environmental Health and Safety (EHS) committee. Has been involved in conducting environmental health and safety workshops and promoting rain water harvesting at the NMK. He was passionate about contributing to social changes and actively participated in the	18

		research process. Embarked on a PhD project focusing on solid waste management in the course of this study.	
A7	Botanic Garden	He is the NMK Nairobi Botanic Garden Manager with wide experience on plants-based conservation issues. Actively involved in promoting rainwater harvesting programmes at the NMK. A member of the Environmental Health and Safety Committee with a passion for contributing to social changes at the NMK.	18
A8	Osteology	Head of Osteology Department and a long serving employee of the NMK. He was undertaking Masters studies in environmental education at the time of this study.	9
A9	Public Relations and Marketing	A Marketing Officer and was undertaking a Masters degree in Business Administration (MBA) at the time of this study. He actively contributed to the research process and the Museum in Change Programme on which he was the marketing task manager.	15
A10	Directorate of Regional Museums, Sites and Monuments	At the time of recruitment A10 was the acting Director of Regional Museums, Sites and Monuments. As a Principal Curator, he is actively involved in the development of regional museums, sites and monuments across Kenya. He holds a Masters degree in Museum Studies and has a keen interest in socio-cultural sustainability issues.	5
A11	Regional Museums, Sites and Monuments	Researcher at the Directorate of Regional Museums, sites and Monuments. He left the group to concentrate on his Masters studies in cultural studies.	2
A12	Education	A Senior Media Officer and a long serving member of the NMK with wide experience in museum education. An active peer educator on the NMK HIV/AIDS awareness programme. Judging from his attendance and contributions during the research process, he was one of the most committed members of the research group with a passion to contribute to social change processes at the NMK.	19
A13	Audio-Visual	Head of Audio-Visual Department and involved in producing interpretive materials (audio visual) for promoting heritage conservation and environmental education processes. Dropped out of the research for unspecified reasons.	1
A14	Nairobi Museum	Curator of the Nairobi Museum Art Gallery and an active participant in the Museum in	11

		Change Programme. A member of the Face of the Nairobi Museum committee.	
A15	Snake Park	Head of the Nairobi Snake Park and a long serving employee of the NMK. She is a leading herpetologist with a keen interest in promoting ecological sustainability. Actively participated in the research process and the Museum in Change Programme.	11
A16	Mammalogy	Curator at the Mammalogy Department and a long serving employee at the NMK. Actively participated in the research process and the Museum in Change Programme. She was involved in addressing issues of pest control within the NMK natural sciences laboratories.	17
A17	East African Herbarium	Head of East African Herbarium, the oldest and largest department at the NMK. A senior research scientist with a deeper understanding of issues related to staff motivation. He chaired a committee that reviewed issues of staff development at the NMK in 2003.	6
A18	Accounts	Acting Principal Accountant at the time of recruitment. She has expertise on organisational learning and change from a business management perspective.	7
A19	Internal Audit	Head of the NMK Internal Audit Unit and a long serving employee of the NMK. He has wide knowledge on organisational changes at the NMK from a financial perspective. Actively contributed to the research process through articulate and balanced views.	15
A20	Human Resource	A Training Officer who was still relatively new at the organisation. She was undertaking a Masters degree in Business Management. Although keen to contribute to social changes, she left the NMK for another job.	3
A21	Ethnography	An ethnographer who was recruited later into the study to provide insights into socio-cultural aspects of sustainability at the NMK.	4
A22	Computer	A Programmer at the Computer Department conversant with budgeting and pay roll issues at the NMK. A22 was recruited later into the study to provide insights into budgeting systems at the NMK.	5
A23	Human Resource	An Administrative Officer who was recruited later into the study to replace A20 at the request of the research group. A23 contributed to issues related to human resource development during the research process.	3

Appendix 2 – Non research group participants as *corporate agents*

Participant (pseudonym)	Department	Position and professional capabilities	Type of participation and remarks
C1	Directorate	Director General of the NMK with interests in bio-medical research	Opened and attended 3 workshops (W2, W3 and W4. Gave enormous support and insightful views. His candid views charmed the research group.
C2	Institute of Primate Research (IPR)	Director of IPR, professor of bio-medical research	Attended 1 workshop (W2) and gave candid views. Later resigned from the NMK.
C3	Directorate of Administration and Human Resource	Director of Administration and Human Resources with research interests in Swahili cultural studies.	Attended 1 workshop (W2) but made no contribution, was elusive in attending our workshops. Later redeployed to head the Research Institute of Swahili Studies in Eastern Africa (RISSEA).
C4	Finance	Financial controller	Attended 1 workshop (W2) and gave useful insights into financial controls at the NMK.
C5	Legal	Legal Officer	Attended 2 workshops (W2 and W3) and gave useful insights into legal reforms at the NMK, also validated some of the identified contextual issues through an interview (I_1).
C6	Centre for Biodiversity	Assistant Director Centre for Biodiversity with research interests in botany.	Opened start-up workshop (W1) on behalf of the NMK Director General.
C7	Human Resource	Principal Administrative Officer, a new NMK employee and still undertaking an MBA course.	Attended 1 workshop (W2) and gave useful insights into organisational change theory. He was passionate about cultural change but left the NMK in unclear circumstances.
C8	Education	Seconded to the NMK Support Programme as Public Programmes Team Coordinator. A long serving NMK employee with vast experience in museum education.	Attended FG6 as a key informant and provided insights into the components of the Museum in Change Programme.

C9	Directorate of Regional Museums, Sites and Monuments	Researcher sites and monuments	Represented Director of Regional Museums, Sites and Monuments during W2. Outlined the key role of regional museums in forging linkages with local communities to address issues such as poverty.
C10	Archaeology	Researcher at Archaeology	Volunteered and captured aspects of FG11 and W2 on video towards the generation of V1 and V2 data.
C11	Audio-Visuals	Audio Visual Officer	Assisted in LCD projection and photography during all the workshops (W1, W2, W3 and W4).
C12	Public Relations	Information Officer	Gave a short interview (I_2) on the issue of poor communication and information flows at the NMK.
C13	Kenya Museum Society (KMS)	KMS – Grants Coordinator and a fundraising consultant with a legal background.	Participated in 1 focus group (FG10) and shared views on how to improve revenue generation at the NMK, was passionate about enabling change.
C14	Kenyatta University (KU)	Lecturer at KU with research interests in environmental education, a former employee of the NMK.	Attended FG5 as a critical friend and encouraged members of the research group to seek cultural change at the NMK.
C15	Volunteer	An expatriate animal specialist with interest in replies who volunteered to work at the NMK Snake Park briefly.	Informally shared experiences as a volunteer at the NMK Snake Park.

Appendix 3 – A sample framework for conducting focus groups

Framework for Focus Group 3 – Addressing poor communication (15/09/05)

1. **Our key question and issue:** How can we address *poor communication and work culture* to bring about cultural change and innovation for sustainability at NMK?

    *   What is important about this issue?
    *   What is certain about this issue?
    *   What challenges does this issue present?
    *   What opportunities does this issue present?

2. Sharing organisational learning experiences as critical reflections.

    *   What activities, thoughts and frustrations have you experienced on organisational changes at NMK since May 2005?
    *   What have you learned? Share your experiences in terms of low and high points.
    *   What has worked well? What did you feel comfortable doing?

3. Activity: Express brief and clear ideas about what you do, think and feel about the poor communication and work culture at NMK.

    I THINK ….

    I FEEL ….

    I DO …..

4. Brainstorm on the current situation at NMK in terms of communication and work culture. Identify opportunities, threats, strengths and weaknesses. Draw on ongoing structural changes and visions earlier shared to develop strategies from moving NMK from current state (in terms of communication issues) to the ideal.

    *   What is the root cause of poor communication and work culture at NMK?
    *   Why don't NMK employees demand alternatives to poor communication?
    *   What are the prevailing conditions that distort the various forms of communication at NMK?
    *   How can these conditions be eliminated to improve communication practices?
    *   In your opinion, what constitutes communication improvement at NMK?
    *   What significant changes have taken place in the last five years in terms of communication improvement at NMK?

5. Draw on ongoing structural changes and visions earlier shared to develop strategies from moving NMK from current state (in terms of communication issues and work culture) to the ideal. Identify a strategic direction for improving communication and work culture at NMK to bring about cultural change and innovation for sustainability.

6. **Date for the next meeting.**

Appendix 4 – A sample of workshop programme and guiding questions

Workshop 2 Programme

Venue: Invertebrate Zoology Training Lab   Date: Wednesday 8th March 2006

Theme: *Changing Patterns of Thinking for Museum in Change*

Time	Event	Content	Facilitator/Chair
0900 hr	*Session 1 – Introduction and Motivation*	• Warm up activity • Overview of Workshop and Introduction to study	A9 Researcher
0930 hr	*Session 2 – Envisioning Museum in Change and Challenges*	• Sharing Vision of Museum in Change • Challenges of realising holistic changes at NMK	Director-General NMK
	Interactions with DG	• Questions and answer mini-session	Researcher
1100 hr	*Tea Break*		
1130 hr	*Session 3 – Group discussions and dialogue with NMK senior management*	• Financial controls and budgeting • Human resource training and motivation • Research linkages • Community participation thro' regional museums • Intellectual property rights	A3
1230 hr	*Lunch*		
1330 hr	*Session 4 – What entails organisational change?*	• Systems thinking • Anticipating Resistance • Discussions	A6 C7
1430 hr	*Session 5 – Wrap up and Evaluation*	• Summary of day • Evaluation • Closing Circle	A16 Researcher
1530 hr	*Closing Tea*		

Workshop 2 guiding questions for group discussions and dialogue

Group 1: Financial controls and budgets (Financial Controller)

For organisational change and sustainability, the NMK requires clearly spelt budgeting procedures and financial controls in place.

- What budgetary and financial control measures are being put in place as a strategy for Museum in Change and sustainability?

- How come the NMK has been operating on an exclusive budgeting system? (Group Facilitator: A7)

Group 2: Staff motivation and development (Director Administration)

To realise a holistic Museum in Change process and sustainability, the NMK requires a motivated and well developed human resource base.

- What measures are being put in place to motivate the NMK employees to realise Museum in Change process in the context of sustainability?

- Why has it taken long for the NMK to revise its policies on staff motivation and development? (Group Facilitator: A20)

Group 3: Research linkages and partnerships (Director Research and Scientific Affairs)

Existing research linkages between the NMK and other organisations are individual driven and fragmented.

- How can the NMK ensure that research linkages are systems oriented and contribute to Museum in Change process?

- Why has the NMK operated without a clearly defined research policy for such a long time? (Group Facilitator: A6)

Group 4: Community participation (Director Regional Museums, Sites and Monuments)

To contribute to sustainability through poverty alleviation programmes, NMK needs to forge strong partnerships with local communities and the private sector.

- How are the regional museums attempting to meet this challenge?

- How are regional museums repositioning themselves within the Museum in Change initiative? (Group Facilitator: A5)

Group 5: Legal issues (Legal Officer)

- How is NMK addressing legal issues on patents and intellectual property rights?

- What are the implications of the new Heritage Bill for a Museum in Change? (Group Facilitator: A9)

Appendix 5 – Samples of photographs taken during the research project

Breaking the ice
Participants in a warm up activity during the start of Workshop 2 (W2) that brought together top NMK managers (e.g. the NMK Director General in the suit) and members of the research group. This activity sought to diffuse top down power relations before the commencement of W2 reflexive deliberations (see Section 6.4.2). I am the one next to the Director General in this picture.

Source: W2 pictures, 8 March 2006

Sharing views on the Museum in Change process
C1 (the NMK Director General) shares his critical views with the participants on the Museum in Change Programme in a Workshop 2 session. This deepened participant understanding of the *drivers* of organisational changes at the NMK (see Section 7.4.1 and Box 7.3).

Source: W2 pictures, 8 March 2006

In a reflexive mood
Participants writing down their reflections of what they learned during Focus Group 14 (FG14) deliberations that explored branding as a tool for enabling social change processes and the emergence of sustainability at the NMK (see Section 8.6.3).

Source: FG14 pictures, 1 November 2006

Workshop group discussions
A group of participants deliberating ways of enhancing the NMK organisational learning capability for social change and the emergence of sustainability in a Workshop 3 (W3) session (see Section 8.7.2 and Table 8.4)

Source: W3 pictures, 28 November 2006

Appendix 6 – Information and consent form

INFORMATION AND CONSENT FORM

Name of Project: ACTION RESEARCH FOR ORGANISATIONAL LEARNING AND CHANGE TOWARDS SUSTAINABILITY IN KENYA

You are invited to participate in a study of action research for organisational learning and change towards sustainability. The purpose of the study is to contribute to change and innovation at the National Museums of Kenya through generation of new knowledge and action possibilities on sustainability. Specifically, it focuses on:

- Exploring action research as a tool for organisational learning and change.
- Identifying contextual issues to take action for innovation and change.
- A critical examination of taken-for-granted assumptions and values within a critical theory perspective.

The study is being conducted by *Abel Barasa Atiti*, an employee of NMK but currently a PhD candidate at Macquarie University, Sydney, contact telephone numbers, 612 9850 4226, e-mail aatiti@gse.mq.edu.au (Sydney) and 254 203742131 (Kenya). This study will therefore meet the requirements for the degree of Doctor of Philosophy in Environmental Studies under the supervision of *Assoc Prof Daniella Tilbury*, Graduate School of the Environment, Tel 612 9850 7981, e-mail dtilbury@gse.mq.edu.au and *Prof Anne Burns*, Division of Linguistics and Psychology, Tel 612 9850 8030, e-mail anne.burns@mq.edu.au

If you decide to participate, your commitment to thinking, planning and taking action to address change and innovation for sustainability at NMK will be required. You will be asked to take part in participatory research activities by attending informal meetings, focus group interviews and team learning workshops as follows:

- Two workshops, several focus group and informal meetings between 28 March and 4 May 05. Information on contextual issues, underlying assumptions and sustainability visions will be generated.
- Weekly focus group meetings during the months of September 05 – March 06. Critical reflections on the implementation of plans will be gathered and lessons learned documented.
- Four one-day team learning workshops, one evaluation workshop and weekly focus group meetings during the months of September 06 – January 07. Information on how to institutionalise change and innovation for sustainability will be generated.

Specific dates and times for the workshops and focus group meetings will be negotiated and set to ensure convenience for all. There will be use of audio recording, photography and sometimes video recording as techniques of data collection. You will always be informed before any audio or video recording is undertaken.

Given that this research will take place in your work environment, no risk or discomfort is anticipated.

Meals, teas and snacks will be provided during focus group meetings and workshops. Since this research is not a funded Project, there will be no direct financial benefits for your participation. However, research expenses on meals and stationery will be funded by Macquarie University as financial support for this PhD study. From the perspective of improving sustainability practices at NMK, your participation will be acknowledged through motivational letters from the Director-General and publicity in the organisation's newsletter.

You will be involved in all phases of the research including continuous reflection on the results as part of feedback process. Any information or personal details gathered in the course of the study will be treated as confidential. Although data from this study will be published in journals and presented in a thesis form, your confidentiality and anonymity will be maintained. Identifying details will be removed from analyses. Your permission will also be sought before sharing the research findings externally. However, the two supervisors mentioned above and thesis examiners will be provided access to the data as part of the requirements for a PhD study. Any other researcher who will contest the authenticity of the results from this study will also be allowed access to the data.

If you decide to participate, you are free to withdraw from further participation in the research at any time without having to give a reason and without consequence.

I, _____ have read and understand the information above and any questions I have asked have been answered to my satisfaction. I agree to participate in this research, knowing that I can withdraw from further participation in the research at any time without consequence. I have been given a copy of this form to keep.

Participant's Name:
(Block letters)

Participant's Signature: _____ Date:

Investigator's Name: ABEL BARASA ATITI

(Block letters)

Investigator's Signature: _____ Date:

The ethical aspects of this study have been approved by the Macquarie University Ethics Review Committee (Human Research). If you have any complaints or reservations about any ethical aspect of your participation in this research, you may contact the Ethics Review Committee (telephone 612 9850 7854, email ethics@mq.edu.au) through **Dr. Idle Farah,** Director-General, National Museums of Kenya, telephone 3742161, email dgnmk@museums.or.ke. Any complaint you make will be treated in confidence and investigated, and you will be informed of the outcome.

☐ INVESTIGATOR'S COPY

☐ PARTICIPANT'S COPY

Appendix 7 – Samples of data analysis

Analysis of Focus Group data through coding

Form of data: Focus Group
Data source: FG3 voice file
Date: 13/10/05
Theme: The root cause of information secrecy at NMK

	Transcript	*Analysis*	*Coding*
Researcher	I have few questions just to ask (pause) as a way of my research because of one of the things that came out is that there is a lot of secrecy, people hiding information like the strategic plan, it has not been released. So my question is: What is the root cause of such secrecy? If we can look into more depth, why are people trying to put things under their drawers, it could be you or it could be your boss? … So let's see what could be the root cause now in more depth?	Trying to critically question why people conceal information at NMK	Exploring roots causes of secrecy
A6	I think probably that may be due to an individual fear… fear may be an issue (Silence).	Individual fear mentioned as one root cause. But fear of what?	Individual fear
Researcher	I remember I mentioned this fear and one person suggested that the best way to solve it is perhaps to have somebody who can counsel others. [A15] mentioned that … but if someone is at the top, what could be the fear now?	Counselling considered as a way addressing fear of the unknown. Here I was reflecting on a previous response.	Causes of fear
A7	Sometimes you see information is power! Sometimes if people are informed … they might be able to go and ask for more. Just like what is happening in the country, they are more informed and they start asking for more and more.	Information linked to power and dangers of people knowing their rights are shared expressed.	Information is power
Researcher	We need to look more into power issues.	Explore more into power issues	
A1	Sense of insecurity … (pause) or inferiority …	What causes insecurity in a position?	Job incompetence and fear of competition

Analysis of participant reflections from Workshop 2 (W2)

Insights gained into the social reality of change processes	Analysis	Emerging Themes
The need to develop a policy on patenting and intellectual property rights at NMK (Researcher).	Learns of the absence of policy on intellectual property rights	*Knowledge as property*
Change is constant and is healthy for any institution; change requires constant consultation (C4).	Has grasped the nature of change	*Change as being constant, consulting for change*
All in all I have learnt and gained a lot from all the members of the focus group and invited guests. May this interaction bring a long lasting and productive change at NMK. I may also take this opportunity to thank you most sincerely for thinking of me as one of your focus group members. God bless you Abel as you go on with your studies in Australia (A12).	Takes an appreciative perspective and acknowledges of being open to different perspectives on change	*Lasting change*
We are changing definitely and need more of such forums (A16).	Experiencing change	*Change forums for continuous learning*
I learned a lot about change, types of change, I was able to learn how to go about systemic changes and also about modes for change (A2).	Gained insights into what organisational change entails	*Systemic change*
The key insights today was the model for organisational change where I learned that – the 7S model is crucial for change (effective), the quadrant model to change is a necessity, and effective communication is a crucial vehicle to ensure good/proper change management by managing human resource (A5).	Gained insights into organisational change	*Models of change, communication for change*
That NMK has a wealth of very resourceful people, that change can be a healthy and beneficial process (C5).	Acknowledges internal resourcefulness at NMK in change	*Internal resource people*
Key insights are – that with appreciation and proper incentives, the *museum in change* is workable, more workshops need to be conducted at all levels to further future betterment of the institution (A22).	Museum in change is workable once staff feel more motivated	*Incentives, change workshops needed*
Insight into museum in change at different levels that change is inevitable, and that change	Has learned about change at various	*Change is inevitable*

can be attained (A15).	levels	
We must prepare our staff/colleagues for attitude change at every level so that Museum in change can take root, NMK management might have started opening their eyes for change (A6).	Has learned the need to prepare NMK staff for change	*Attitude change*
Internally driven change has a human face; change is by choice (A3).		*Internally driven change*
Looking at NMK as one whole unit, the key players in effective change (AC).		*Systemic change*
Directorate of corporate affairs is now officially in NMK structure, the FC is flexible to change as regards financial matters (A20).	Has changed perception of FC as a rigid person to change on financial issues	*Flexibility to change*
Change is inevitable, careful listening is important especially if you are to answer the question (C9).	Change as being inevitable	*Good listener*
The insights I gained are – the pending training for managers to fit within the 'museum in change', the need to factor some spin-off effects to my colleagues, that as a leader and manager at my level, I need to move out to the people under me to solicit support for any change that I need to implement (A7).	Has learned on how to get support from juniors by moving to them	*People-oriented leadership, training for change*

Appendix 8 – Dissemination of findings

Sharing interim findings with the participants: a sample of Focus Group summary (FG11 Summary)

Reflections on the 1ˢᵗ March 2006 official launch of the Museum in Change Programme

The following reflections were shared by the participants as insights gained from the official launch of the Museum in Change Programme by the President of Kenya:

- Different dimensions of power relations (both internal and external) are driving the 'Museum in Change' process. Changes at NMK are both internally and externally driven.

- To realise the 'Museum in Change' process through cultural change, NMK requires a strong lobbying mechanism in pushing the change agenda. The DG in collaboration with the board chairman is expected to take the lead in lobbying and fundraising for NMK.

- The proposed Directorate of Corporate Affairs will play a key role in the marketing and development of NMK. It is however not clear whether NMK is operating within the proposed new structure or the old one.

- The current chairman of NMK Board is active and is keen to bring changes at NMK. Nevertheless, there is need to sensitise the Board members on NMK issues.

- Board membership need to be looked into since some members have overstayed and lack qualities of being change agents.

- The laying of the stone ceremony was a good marketing opportunity for NMK. However, there is more emphasis on a few departments because of historical reasons. To change this culture, there is need for interdepartmental exhibitions and open day. An open day can become an annual event that would market all NMK departments.

- There is a need for monitoring and evaluation of the change process at NMK. As change agents, the research team is expected to change others to realise sustainability at NMK. The use of questionnaires during monitoring and evaluation was suggested.

Reflexive deliberations on issues of staff motivation and development at NMK

The following insights emerged from engaging the participants in deliberating issues of staff motivation and training at NMK:

- Although aspects of the new structure have been implemented at the top management level, most employees at NMK are still demoralised.

- There is no current scheme in place at the institution to reward hardworking and innovative employees.

- No inventory of skills of the existing employees has ever been taken in the recent past

- Currently, no recruitment policy is in place, as a result NMK staff establishment is unclear to many heads of departments. At times employment of new staff does not reflect the needs of departments.

- Succession planning is required to ensure continuity

- There are ongoing efforts to develop a training policy. In the absence of such a policy, training has been haphazard and sometimes not consistent with the needs of the organisation.

- To ensure forward planning, a budgetary committee needs to be instituted. A budget to cover training, promotion and motivation is essential for the process of change.

- To address issues of training and motivation holistically, there are efforts to develop training policy, schemes of service, recruitment policy and skills inventory.

- There are plans to offer training to all heads of departments to enable them undertake skills inventory and training needs in their areas.

- To institutionalise change at NMK, relevant courses that address this will be required. A training component is present in the NMK Support Programme. Training on how to manage change need to be a reality.

Disseminating findings to the wider NMK community

Executive summary of Stage Two Research Report (findings from the second broad cycle of inquiry)

This report is based on Stage 2 research activities that I undertook at the Kenya National Museums (NMK) between September 2005 and March 2006. The activities have built on those of Stage 1 in which contextual issues related to organisational learning and change for sustainability were identified with a research team at NMK. Through processes of action and critical questioning, some of these issues were addressed towards cultural change and innovation for sustainability at the organisation. Underlying assumptions on organisational learning and organisational change were reviewed within a critical systems thinking perspective. This provided opportunities for exploring a critical action research epistemology for organisational learning and change towards sustainability in a Kenyan context.

Stage 2 research activities have deepened our understanding on contextual ontological, epistemological and pedagogical implications of addressing sustainability issues from an insider critical action research perspective. The research team and I have gained a deeper understanding of the forces shaping current organisational reality at NMK. Furthermore, an improved understanding of organisational learning and change for sustainability has emerged through our examining of aspects on organisational culture, team learning and power relations at NMK.

Disseminating findings to the international research community

Abstract of manuscript accepted for publication in the Environmental Education Research Journal

A critical exploration into organisational learning and sustainability in a Kenyan context

Organisational learning for change is fundamental to achieving sustainability in corporations and higher institutions. However, as 'real entities' organisations embody emergent properties and powers that condition agential capabilities to address sustainability issues. This article draws upon findings from a critical action research study that recently explored organisational learning and sustainability at the National Museums of Kenya (NMK). It offers theoretical and practical implications of exploring organisational learning and sustainability within a specific context. Drawing on Margaret Archer's social realism, it probes agential, structural and cultural factors that constrained change and sustainability at the NMK. Improving poor information flows at the NMK is used as an example to highlight attempts that were made to enable organisational learning and sustainability at the organisation. The article argues that strengthening agential capabilities through communicative interactions may either lead to change or stability in an organisation. The study at the NMK has contributed to a deeper understanding of forces that operate at the organisation to influence change and sustainability.

Keywords: Critical action research, Critical pedagogy, Communicative interaction, Organisational learning, Social realism, Sustainability

Appendix 9 – Extracts from ethical approval application

(Ethics approval Reference Number: HE25FEB2005-D03833C)

OFFICIAL USE ONLY

SURNAME:

REF. NO.:

ARCHIVE: **7** ○   **25** ○

MACQUARIE UNIVERSITY

ETHICS REVIEW COMMITTEE (HUMAN RESEARCH)

INITIAL APPLICATION FORM (Version 1.1 January 2004)

ALL RESEARCHERS MUST COMPLETE SECTIONS 1–13

DO NOT COMPLETE OR ATTACH APPENDICES UNLESS RELEVANT TO YOUR APPLICATION

Double Click the Yes, No, or N/A check box to indicate your answer.
For further information on how to complete this form, view the Human Ethics Committee Application Guidelines.

SECTION 8: POSSIBLE CONFLICT OF INTEREST

8.1   In undertaking this research do any "conflict of interest" issues arise? *(For instance, is the researcher in a dual role such as researcher/teacher, researcher/carer, researcher/employer? Does the researcher have access to personal files/databases as a condition of employment rather than as a researcher?).*

NO ☐   **YES** ☒

If you answered YES, please provide details of the conflict of interest and considerations or mechanisms in place to address these issues.

Since this research will be imbedded in my own organisation's micro-climate of personalities and relationships, it will create a role duality where my 'work' lives conflict with my 'research' lives. I will maintain the balance between the two roles through a democratic approach to data collection. Participants will not be treated as 'research subjects' and they will be encouraged to own the project. Being an insider, it will be much easier to negotiate for the ownership of findings. But as a researcher, I will strive to hold information from participants in confidence. Decision making will involve caring, help, support, respect for the participants, honesty and integrity.

8.2 Will this research be undertaken on behalf of (or at the request of) a commercial entity, or any other sponsor?

NO ☒   YES ☐

8.3 Do the researchers have any affiliation with or financial involvement in any organisation or entity with direct or indirect interests in the subject matter or materials of this research?

NO ☐   YES ☒

If you answered YES, please provide details.

This research will take place at NMK where I am an employee. NMK is affiliated to Botanic Gardens Conservation International (BGCI) that will have direct interests in the subject of this research.

8.4 Do the researchers expect to obtain any direct or indirect financial or other benefits from conducting this project? (Note that such benefits should be included in the Information Statement and Consent Form).

NO ☐   YES ☒

If you answered YES, please provide details.

This project will fulfil the requirements for the Degree of Doctor of Philosophy in Environmental Studies at Macquarie University.

8.5 Have conditions been imposed upon the use, publication or ownership of the results including the review of data, manuscript draft or scientific presentation by any other party than the listed researchers?
*(**Note**: The Committee is unlikely to approve arrangements that involve the censorship of research findings in publications.)*

NO ☒   YES ☐

SECTION 9: OTHER ETHICAL CONSIDERATIONS

9.1 Are there any further ethical considerations that you wish to raise?

NO ☐   YES ☒

If you answered YES, detail what these considerations are.

Action research is a dynamic and emergent research process of interaction between action, learning and reflection. Consequently, more ethical issues than as laid down in this application process are bound to emerge in the course of the project. For example, complex interpersonal ethics may arise from deep involvement between the researcher and participants in which the issue of 'self and other' becomes a central ethical consideration. Interaction between personal ethics and social ethics can potentially produce complex ethical considerations such as the integrity of the researcher and those of participants. In this research, integrity will entail being true to the person so identified and acting in accordance with principles that make us who we are.

Other ethical considerations that will arise unexpectedly during the course of the project will be addressed through honest and authentic relationships with the participants. I will endeavour to establish and nurture trust and supportive relationships between myself and the participants. This will be based on human values such trust, and a caring attitude. I will recognise the fact 'others' have values that will be different from mine. There will be a continuous evaluation of ethical codes with the participants using tools of action, learning and reflection to address any complex ethical considerations that may emerge.

SECTION 12: CERTIFICATION

12.1 To the best of my belief the proposed project conforms in all respects with the National Statement on Ethical Conduct in Research Involving Humans.

Information about and links to legislation, guidelines and codes governing research with humans is available at:
http://www.ro.mq.edu.au/ethics/human

Signed:

Name (block letters): ABEL BARASA ATITI

Date: 27 FEBRUARY 2005

12.2 I have read and discussed this ethics application with the student named above.
Signature of Supervisor:
(where applicable)

Printed Name of Supervisor: ASSOC PROF DANIELLA TILBURY
(block letters)

Date: 27 FEBRUARY 2005

Appendix 10 – Findings from Workshop 3 on issues of staff development

Key Groups	Topics to be Covered	When	Approaches	Possible Sources of Funds
1. NMK Board of Directors	Corporate governance	Immediately on inception	Seminars	NMK, Ministry
2. Directors Executive Committee	• Human resource (HR) management • Performance management • Policy familiarisation • Effective communication • Leadership and systems thinking skills • Health and safety • Labour laws and industrial relations • Entrepreneurial and business skills	Immediately and on a continuous basis	Seminars and workshops, refresher courses	NMK, Government of Kenya through the Directorate of Personnel Management (DPM)
3. Heads of Departments	• HR and financial management • Leadership and Change management • Professional ethics • Policy familiarisation • Report writing, time management • Customer care and public relations • Handling meetings • Team building	Immediately and on a continuous basis	Seminars, workshops, short courses, expert presentations, in-house training	NMK, Ministry, projects, DPM, consultancies
4. Research Scientists	• Team building and Interpersonal skills • Specimens and data collection skills	Bi-annually,	Group expeditions (institutional)	NMK, Projects, Ministry, KMS, Collaborators, Corporate

		• Communication skills • Project management			
5.	Human Resource and Administration	• Public relations skills • Human resources issues and information systems • Pension skills • Customer care and record keeping • Policy formulation and implementation • Effective communication	Immediately and on a continuous basis	Short-term training, job rotation, refresher courses	NMK, Ministry, Case studies, Consultancies, Short courses
6.	Accounting and Auditing	• Public relations skills and customer care • Information technology accounting systems and documentation • Team building • Marketing • Performance management	Immediately and on a continuous basis	Short-term courses, proper orientation, case studies, Public relations marketing firms	NMK, Ministry, Projects
7.	Security	• Security related issues • Disaster management • Incident reporting and tracking • Health and safety • Customer care	Immediate	Courses, Workshops, Case studies, Consultancies	NMK
8.	Operational (Support) Staff	• Customer relations • Motivation and attitude change • Communication • Health and safety (waste management) • Team building	Continuous	Study tours, Attachments	Workshops, in-house training

9. Secretaries	• Public relations • Communication (oral and writing) • Administrative issues and ethics	Immediate	In-house training, workshops and consultancies	NMK
10. All Staff	• NMK orientation • Staff re-engineering • Team building • Performance management • Institutional culture • Ethics	Continuous	Focus groups, Seminars, Conferences, Study tours, Monthly briefings, newsletter, retreats, shared activities, rewards and celebrations, staff party	NMK, International partners, Ministry

Source: W3 data, 28/11/06