THE MANAGEMENT OF KNOWLEDGE: A MODEL FOR THE AFRICAN RENAISSANCE

BY

ANDREAS GERHARDUS VELTHUIZEN

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PROMOTER: PROF S B O GUTTO
JOINT PROMOTOR: PROF D W NABUDERE

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ABSTRACT

The study goes beyond knowledge existing in the literature study of the philosophy and theory of knowledge, knowledge management, African knowledge and the management of knowledge by African institutions, including the peace and security architecture of Africa, to reveal a coherent conceptual framework and themes to guide the field research. During the field studies of specific cases in the Great Lakes region of Africa, principles and practices emerged that formed a framework for a constructed Trans-dimensional Knowledge Management Model (TDKM-M) to develop a theoretical model for the management of knowledge for conflict resolution as the first step towards the revival of Africa. The study proposes practical solutions for the management of knowledge that would empower decisionmakers to intervene successfully in conflict situations. Furthermore, the study serves to expand the knowledge base in the field of trans-disciplinary African studies, transcending the boundary between political science and epistemology to navigate the middle ground between disciplines and the space that lies beyond all disciplines and dichotomised thinking towards a new holistic understanding. A systems approach using MIT (multi-disciplinarity, interdisciplinarity and trans-disciplinarity) and qualitative research methodology on a transnational level was followed. The study consists of a literature study and a field study consisting of a pilot study, semi-structured interviews and participation in communities of practice to access the worldviews of diverse cultures. An observable knowledge dimension, consisting of a normative foundation, empirical knowledge domain and analytical knowledge domain, is identified. Furthermore, a tacit metaphysical knowledge dimension is identified that is informed by the observable dimension. The two dimensions transacts with each other to attain a higher level of trans-dimensional knowledge. The TDKM-M proposes principles and practices of how trans-dimensional knowledge, including indigenous African knowledge and external knowledge, can be managed in a collective middle ground to produce holistic understanding. This higher level of understanding can activate intervention into the causes and consequences of conflict. Innovation of African society could follow, achieving desired outcomes such as peace, justice, human rights, self-empowerment and innovation towards transformative growth, competitiveness and negotiate equilibrium with the global community, and ultimately the revival of Africa.

<u>Key Terms</u>. Knowledge Management; traditional African knowledge; indigenous African knowledge; collective knowledge management; knowledge management model; political science; epistemology; philosophy of knowledge; Great Lakes region; Uganda; Acholi culture; Rwanda; Gacaca; International Criminal Court; the Democratic Republic of the Congo; Trans-disciplinary Studies; Afrokology; African renaissance studies; strategic studies; conflict studies; peace studies

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To the God who will bring peace and justice for all

LIST OF ACRONYMS

APRM -The African Peer Review Mechanism
ARLPI -Acholi Religious Leaders' Peace Initiative

ARS -African Renaissance Studies

AU -African Union

CKC -Collective Knowledge Centre
CCM -Centre for Conflict Management
CEWS -Continental Early Warning System

CMG -Collective middle ground

CODESRIA -Council for the Development of Social Science Research in Africa

COP -Community of practice CRF -Catholic Relief Services

CSIR -Council for Scientific and Industrial Research

CSO -Community Service Organisation

DBSA -Development Bank of South Africa

DDMC -District Disaster Management Committee

DRC -Democratic Republic of the Congo

EAC
-East African Community
EDP
-electronic data processing
EPLF
-Eritrean People Liberation Front
EUFOR
-European Forces in the DRC

FPOs -Focal Point Offices
FRR -Field Research Report
ICC -International Criminal Court

ICT -Information and communication technology
ICTR -International Criminal Tribunal for Rwanda
ICTR -International Criminal Tribunal in Rwanda

IDPs -Internally Displaced People

IEC -Independent Electoral Commission

IGAD -Intergovernmental Authority on Development

IKS -Indigenous Knowledge Systems

KM -Knowledge management
LRA -Lord's Resistance Army
MCC -Mennonite Central Community
Millannium development goal

MDG -Millennium development goal
MIT -Multi-, inter-, trans disciplinary
MNC -Multi-national Corporation

MONUC -International Observer Mission to the DRC

MoU -Memorandum of Understanding NRM -National Resistance Movement

OCHA -UN Office for the Coordination of Humanitarian Affairs

OAU -Organisation for African Unity

PAP -Pan African Parliament
PSC -Peace and Security Council
RECs -Regional Economic Communities

SADC -Southern African Development Community

SMS -Short Message System

SPLA -Southern Sudan Peoples Liberation Army

STRC -Scientific and Technological Research Commission

-Traditional Knowledge Digital Library -Trans-dimensional KM Model **TDKL**

TDKM-M

-Tripartite Plus Intelligence Fusion, Operations and Analysis Cell TFC

-Trans-national Organization TNO -Tigrian Peoples Liberation Front **TPLF**

-United Nations UN

-UN Humanitarian Action Organisation -United Nations Development Programme **UNCHAO** UNDP

-United Nations Educational, Scientific and Cultural Organization. **UNESCO**

-Ugandan Peoples Defence Force **UPDF** -Universal Primary Education UPE

-Wide Area Network **WAN**

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CHAPTER 1: GENERAL ORIENTATION TO THE STUDY

'All matter originates and exists only by virtue of a force. We must assume behind this force the existence of a conscious and intelligent Mind. This Mind is the matrix of all matter'-Max Planck

1.1 INTRODUCTION

The management of knowledge is not a 20th century discovery but is as old as human civilization. Through the ages knowledge spread through trade, wars and the migration of people. Early civilizations depended on breakthroughs in science and technology to develop and humans desired to know more about their world. Progress took place through invention, interaction with nature and with each other. Philosophies and belief systems on how people should live their lives developed. Questions were asked on how more knowledge could be gained and used and what tools and methods should be used to solve problems. Well-known results are the development of bronze and iron tools, the wheel, the sail, writing and firearms.

According to current debates, human knowledge has been developing ever since the birth of humanity in the area from the Great Rift Valley of East Africa and Southern Africa, now accepted as the 'Cradle of Humankind'. Modern scholars assert that molecular biology has revealed that the earth was first colonised from Africa and then later re-colonised by Homo sapiens, migrating from Africa to the rest of the planet (Oliver 1991, 252). It was in the 'Cradle of Humankind' that the original ideas that formed human knowledge and wisdom were created (Diop, 1991:361).

From approximately 550 BC the world was marked by the fast dissemination of ideas, including Buddhism, Hinduism and Judaism. Philosophers ('lovers of wisdom') came forward who attempted to understand by applying logic and reason how the universe was put together. It was especially philosophers such as Confucius, who influenced beliefs. The ancient community of cultures between the Atlantic Ocean along the Mediterranean and the Red Sea, including North Africa, is seen as the origin of thought and the knowledge of modern people. (Davidson 2001).

According to archaeological findings, the relationship between Ancient Africa and Asia indicates an African presence in Southern Mesopotamia (Babylon and Sumer) and shows that

Africans were involved in the construction of the Tower of Babel. The Babylonians copied all their knowledge from the Egyptians. (Churchward 1910, 212-213).

The Greek knowledge systems also originated in Egypt. Egypt was the classic land where most Greek scholars went to study, especially Alexandra. (Amélineau 1916, 8-9). It is believed that Aristotle went to Egypt with Alexander and had access to priestly material in the temples and freely acquired books from the library. In the process, he adopted the Egyptian concept of creating order from chaos through mind and word, as well as the doctrine of the soul as discussed in the Egyptian Book of the Dead. (Olela 1998, 49).

After about the year 332 BC, when Alexander the Great liberated Egypt from the Persians, interaction between Africa and the Near East took place against a background of passionate hunger for knowledge among the Greeks. In 334 BC, Alexander (a student of Aristotle when Alexander was young) launched his global venture, with which he proceeded swiftly until his death in 323 BC. Alexander's aim was not limited to conquering lands only but also to explore them. He therefore dispatched generals and scholars, to report to him in detail on regions previously unmapped and uncharted. The campaigns of Alexander brought extensive addition of empirical knowledge of geography to the world outside Africa. The reports he received survived and motivated scientific research and study of the earth with its natural, physical qualities and inhabitants. This new spirit gave rise to the great library and mouseion in Alexandria. Alexandria became the cultural and knowledge capital of the world.

Ptolemy I had three objectives with the establishment of the library: the perpetuation of existing knowledge; the increase of such knowledge and the diffusion of knowledge. Ptolemy II continued the good work of his father, collecting books of the Ethiopians, Indians, Persians, Elamites, Babylonians, Assyrians, Romans Phoenicians, Syrians, and Greeks. In the end 400 000 volumes were collected. The museum developed into a university and knowledge node, presenting subjects such as astronomy, mathematics, literature, and medicine. 'Hellenization' of Egypt followed until it became a colony of Rome in 595 AD. (Jackson 2005, 119-120).

There is little doubt among scholars that Greek philosophy derived from ancient Egyptian traditions and has African cultural roots. The works of Aristotle and other Greek thinkers were synopses of some aspects of ancient Egyptian wisdom. Aristotle was personally present

in Alexandria during the time the library was assembled under the direction of Demetrius of Phaleron, a pupil of Aristotle. In his work, 'The Metaphysics' (Warrington 1994, 53), Aristotle concedes that mathematics originated in Egypt among the priestly caste. James (1954) provided some evidence that the Greeks were not the creators of philosophy or metaphysics, but students who took credit for African and Asian discoveries, ideas, and knowledge that pre-dated Greece by thousands of years. Before the Hellenistic amalgamation of West and East, the ancient Near East including Egypt, was a major source of the emerging Greek mythology, philosophy, science, technology and aesthetics.

Armed with these insights (and taking credit for them), Greek philosophers started to question the universal standards of truth that dominated thinking in Europe for more than 1 500 years. Plato and his concurrent, Aristotle, questioned the nature of the world, existing human beliefs, thought and knowledge. They succeeded in summarising knowledge through history up to that time. Aristotle's mind ran along practical lines and made him observant of the facts that could be verified, or in other words, empiricism.¹

During the Middle Ages (500-1500), through trade and wars, Muslims, Byzantines, Europeans and Africans interacted more intensely than before and a new body of knowledge was created. The crusades, for instance, developed new technology in ships, navigation and weapons. The Muslims started to preserve the writings of the Greek philosophers and placed a high value on knowledge. The development of knowledge was influenced negatively by mostly illiterate Germanic invaders. Learning declined and the knowledge accumulated by the Greeks was nearly lost. It was replaced by a tradition of Germanic songs and legends. It was also during these times that dialects in Germanic and Latin developed, complicating the sharing of knowledge. An exception to this was Charlemagne (who ruled most of Europe from 771-814) who surrounded himself with scholars, encouraging education, training and the keeping of libraries.

After the completion of the Arab conquest of North Africa in 708 AD, the Arab-Moorish Empire became known for its brisk intellectual activity. The Caliphs were enlightened patrons of higher learning, maintaining immense libraries and offering fortunes for new

¹ The chronology is based on the work of Beck. R.B. (Ed.).1999. *World History. Patterns of Interaction*. Evenston: McDougall Little.

manuscripts. An important event was the establishment of a "House of Wisdom" in Baghdad in 800 (founded by Caliph Harun-al-Rashid) with library, academic, observatory and translation facilities under a Jew, Professor Joshua Ben Nun. Another important event was the appointment of a Christian scholar to the presidency of a college of Damascus by Caliph Al-Mamun, demonstrating the intellectual tolerance of the time. Moorish scientists of the twelfth century are also believed to be the first people to reject the belief that the earth is flat, long before Magellan was born. (Jackson 2005, 180-182).

In the mid-1200s, a revival of learning took place. Athens, Alexandria, Rome and Constantinople became centres of learning. By 1500, ten million books had been printed and learning through reading was increasing. Scholars were allowed to produce literature in their home languages. Subsequently vernacular languages flourished and a burst of creative activity was experienced. New ideas and values developed from that. Scholastic use of Aristotelian knowledge to debate religion increased. Through the influence of Thomas Aquinas, a belief system developed that biblical truths can be proved by logical argument. Furthermore, a democratic value system was established, resulting in demands for reforms.

The 19th century brought renewed realism. Science, operating through objective observation and the realistic reporting of facts, was now accepted as good practice. During this time, several scholastic discourses developed which were of significance for current discourse on indigenous knowledge in Africa.

During the 20th century, the world was characterised by intensified interaction. Through improved communication systems and transportation, ideas started to move more rapidly. Satellites were launched making real-time viewing of events over long distances possible. Small and powerful computers were developed. The development of the internet and cellular phones allowed experts to connect and share knowledge over long distances. The information industry, consisting of 'knowledge workers' and information and communications technology, developed to channel and process information to assist in the 'creation of new knowledge'.

The 20th century also brought the use of knowledge for warfare and the resolution of conflict. The philosophical approach to knowledge became more holistic, allowing for synthesis in the production of new knowledge. Technological knowledge resulted in the development of the

machine-gun, warplane and battle tank, and the development of the nuclear bomb. The applicability of knowledge led to indoctrination, to instruct people on political beliefs in order to mould their minds. Using information to sway people to accept beliefs became an art. Mass communication through radio, telephone, and motion pictures suddenly made the universe seem smaller. Ideas were challenged, as they had never been before.

In Africa, progress was made with the development of epistemological skills and tools that could build upon the historic notion in Africa of synthesising in a spirit of reciprocity and sharing to create new knowledge. Specific methodology and methods are developing at present to manage, observe, structure, and interpret information from different cultural environments to merge it into a new higher order of understanding or wisdom keeping in mind the impact of mass communication and the rapid movement of ideas of the modern era.

The challenges of the African Renaissance require knowledge from all those who participate to make the vision a reality. A wealth of knowledge is already available in Africa, including a wealth of indigeneous knowledge. Indigenous knowledge has always been around, but external influences forced it into the background and made it less visible than those systems that are associated with modern media. The unfortunate results are that the use of indigeneous knowledge in Africa for policymaking is still limited and mostly overwhelmed by a Western or 'modernist' view of events.

1.2 THE NEED FOR THE STUDY

Today there is a need in Africa for the integration of information for decision-making purposes. Information from official and business structures such as the African Union (AU), the structures of its member countries, trans-national organisations, civil society, and indigenous knowledge systems (IKS) must become usable knowledge. The constant flow of information processed from structures should be merged to become the basis for decision and actions in, for example, conflict resolution and the eradication of poverty. In this regard, there is a need for the private and public sector and civil society to collaborate. Furthermore, it is necessary for the African structures to accommodate the perspectives of local communities, the content of IKS, and intellectual capital of society ('higher minds') to ensure understanding of the challenges.

Making knowledge useful requires the unlocking and retrieval of tacit knowledge, not only what is on computers but also what is in the minds of people. To integrate perspectives from a diversity of sources into useful knowledge is a major challenge. A new holistic understanding of the situation, prompting rational and effective decision and actions, needs to be found.

Against the background of the African Renaissance it is imperative that the wealth of knowledge embedded in African society, including IKS is mustered to revive the traditional knowledge of Africa. Furthermore, it is important to process the vast body of knowledge in African society, not only in terms of flow, but also in terms of content.

1.3 THE PURPOSES AND AIM OF THE STUDY

The general purpose of the study is to:

- develop theory and expand the knowledge base in the field of humanities, especially concerning African studies, and
- to propose practical solutions for the production of knowledge that would empower decision-makers to intervene successfully in the cycle of cause and effect of conflict that prevents an African Renaissance.

The specific aim of the study is to create a theoretical model for the management of knowledge, including indigeneous knowledge, to achieve desired outcomes for Africa while promoting the African Renaissance.

The crux of the study is to find a knowledge management (KM) solution on how to accommodate the wisdom embedded in the indigenous knowledge systems, communities and 'higher minds' of Africa in decision-making and actions together with knowledge brought by the trans-national organisations in a collective middle ground to create a new holistic knowledge.

1.4 THE RESEARCH PROBLEM

It is imperative that a solution be found to gather and process all perspectives and make the results available to decision makers in Africa. The purpose of KM is to produce new knowledge, in the case of this study, from what is in the minds of people to improve the

conditions of Africa, with the African community participating in the whole process. The question that arises is:

'How should the knowledge of Africa be managed to promote positive outcomes for the continent"

When this research problem was analysed the following sub-problems presented themselves:

- Sub-problem 1. 'What is knowledge, knowledge in Africa and knowledge management?'
- <u>Sub-problem 2</u>. 'How is knowledge currently managed to intervene in conflict that prevents an African Renaissance'?
- <u>Sub-problem 3</u>. 'What is an appropriate new model for the management of knowledge in Africa to promote positive outcomes for Africa?

1.5 REVIEW OF EXISTING LITERATURE

Several sources were consulted on the subject of KM; including sources with a focus on Africa (see Appendix A for References). Sources consist of books, specialist periodicals, internet publications and 'blogs', material obtained during seminars, formal training courses in KM tools and strategy, interviews, and presentations at seminars on the subject of KM. Current awareness has been maintained through regular internet newsletters on the philosophy of knowledge, KM, international relations, and conflict management in Africa. It was found that the subject was extensively covered but a comprehensive synthetic model that can be used for the management of knowledge for the African Renaissance, could not be found.

Literature related to sub-problem 1 is presented in Chapters 2, 3 and 4. It became clear that no study on knowledge would be possible without clarifying the concept 'knowledge'. Therefore, in Chapter 2 the focus is on the philosophy and theory of knowledge and starts with a literature study of the concept 'knowledge'. It was found that studies on knowledge could broadly be divided into studies dealing with the normative, empirical, and analytical domains of knowledge. Certain studies reflect on interaction among domains. A central argument that could be identified is that the domains supplement one another to enhance knowledge and that holistic knowledge should be created systematically. The philosophy of knowledge addresses the merging of perspectives to form holistic knowledge. In the context

of a knowledge system, it deals with the flow of knowledge among entities, continuously creating new knowledge.

In Chapter 3, the researcher continues to review the generic foundations of the management of knowledge, with the emphasis on theories addressing a holistic view of the management of knowledge. Previous research into the concept 'KM' revealed a vast body of literature dealing with concepts like imbalances in the 'new economy', 'intellectual capital', 'social capital', 'networking', the 'learning organisation', 'knowledge strategy', 'holistic knowledge' and 'the protection of knowledge'.

In Chapter 4, the researcher reviews the literature on knowledge in Africa and African knowledge to see what theoretical concept manifests in the African context. Research dealing with 'knowledge in Africa' was scrutinised. Publications differentiate between 'African knowledge' and 'knowledge in Africa'. It was found that African knowledge is seen as knowledge traditional to Africa, while knowledge in Africa refers to the indigenous knowledge system of Africa overlapping with global religious systems, ideology, and ancestral beliefs, sometimes in a relationship of control by modern knowledge systems. Especially the value of knowledge narrative and collective memory in the traditional African community was identified.

Chapter 5 addresses sub-problem 2 and reviews literature on the desired outcomes for Africa with emphasis on the African peace and security architecture, the African Renaissance, NEPAD (New Partnership for African Development) and participation of African society in the management of knowledge. The content analysis of literature on KM for the African renaissance alerted the researcher to a few important themes related to the research problem that served as focus for field research

- The use of African knowledge systems to prevent conflict.
- The finding of collective middle ground between civil society, trans-national organisations and state structures through KM.
- The desired KM situation in Africa of a universal network of collective KM involving a sphere of interactive networks linking intellectual and social capital of global, continental structures, regional structures, state structures, civil society, traditional communities (with special emphasis on the empowerment of historically marginalised

communities), community organisations and public citizens in a relationship of horizontal power equilibrium.

- Constraints to KM such as the continued reluctance to share because of exclusive objectives, the notion to protect because of distrust, the persisting vertical power-relationship between major powers and Africa, lack of objectivity in the merging of insights, time management, limitations on enabling capacity and communication (including language differences).
- Policy frameworks, strategies, and action plans must be in place to enable KM in both society and business.
- Knowledge production involving a synthesis of indigenous African knowledge (including information that is the result of tacit knowledge in oral or symbolic format that was processed to be tangible) and tangible knowledge inputs from as many other participants in the network that that reflect all possible worldviews as possible.
- A culture of learning through the reconstruction of the approach to education to develop wise leaders, capable managers, and facilitators as well as expert knowledge workers who understands the interrelatedness and interdependence of knowledge systems.

Based on the conclusions of the literature study a hypotheses and a conceptual framework (see Appendix B) were formulated to guide field research.

1.6 THE HYPOTHESES

The hypotheses, as presented for the initial proposal for this study, focus interpretation on the dynamics of knowledge creation within a social context to assert meaning to the research without 'boxing' data into pre-cast categories. Tentative answers to the research problem are as follows:

<u>Hypothesis 1</u>. If a synthesis of normative, empirical, and analytical perspectives, including indigenous knowledge is formed, holistic understanding is created.

<u>Hypothesis 2</u>. If the principles and best practices of KM are applied to make decisions and to take actions to intervene and terminate conflict in Africa it will result in positive outcomes for Africa.

<u>Hypothesis 3</u>. If the normative knowledge foundation of Africa is renewed by the application of intellectual capital, the management of indigenous knowledge collectively with the available social capital of Africa, holistic understanding is created that activates intervention that would promote the revival of Africa ('The African Renaissance').

1.7 DEFINITION OF MAIN CONCEPTS

Although there is no single agreed definition of 'knowledge', Plato's definition of knowledge as 'justified true belief' is often cited by scholars (Nonaka & Takeuchi, 1995). In the KM context Sveiby (2005) describes it as the capacity to act effectively. In this study, it was found that 'knowledge' is a synthesis of tacit, explicit, normative, empirical and analytical perspectives that reveals holistic understanding, the result of discourse among people who transcends boundaries, physically and mentally.

'Normative knowledge' is described by van Dyke (1960, 8) as statements that express a conception of the desirable or value ultimate preferences. Ends, purposes and norms are expressed, based on positivism or rationalism. Rationalism sees reason as the source of knowledge, while positivism implies the conception of what is desired or value preferences, driven by will or emotion.

'Empirical knowledge' describes what happens in the real world, through observation by using the senses, to verify scientific claims. Empirical statements are factual about reality and assert alleged truths about reality and deal with what 'is'. (Van Dyke 1960, 10).

Gregor (1971, 306) asserts that 'analytical knowledge' claims involve inspection of the logical properties of assertions or language, verifying synthetic truth statements. Analysts attempt to determine probability, or to correct it. Analytical knowledge is inferential truths, based on inductive evidence.

'Holism' is a term originally coined by Smuts (1926, 317-318) from the Greek word 'holos', which means whole. Holism is the ultimate synthetic, ordering, organising, regulative activity in the universe, which accounts for all structural groupings and syntheses in it. Holism explains both the realism and idealism 'at the heart of things' and is a more accurate description of reality than one-sided world-views.

'Indigenous Knowledge Systems' refer to the combination of knowledge systems encompassing technology, social, economic and philosophical learning or educational, legal and governance systems. (Odora-Hoppers & Makhale-Mahlangu 1998). According to Houtondji (2002, 26) indigenous knowledge is empirical rather than rational in the social, economic, political, and cultural context. In Chapter 3, it was found that the indigenous African knowledge system is characterised by a holistic cosmological view, formed through habitual synthesising and networking, absorbing all knowledge inputs through the ages, including emancipatory knowledge, vital for the economic and spiritual self-liberation of Africans.

'Knowledge Management' is the process of identifying, collecting, storing and transforming data and information into an intellectual asset that is available to all people (Cronjé, du Toit, Marais, Motlatla 2004, 586). KM is a strategic approach to manage knowledge resources, including the motivation of people to share their capacity to act. (Sveiby 2005). In Chapter 4 it was found that KM is the art and science of managing a process, to transform and enhance what people know (intellectual capital), individually and collectively (social capital), into a tangible knowledge resource needed for defendable decisions and actions.

'Social capital' is defined as the advantage created by the location of a person in a structure of relationships and explains how some people gain success in a particular setting through their connections to other people (Nabudere 2006c). Putnam (2000) differentiates between 'bonding social capital' and 'bridging social capital'. The former refers to the value assigned to social networks between homogeneous groups of people and the latter to that of social networks between socially heterogeneous groups.

According to Nonaka & Takeuchi (1995) intellectual capital is the collective education, skills, experience, energy and attitudes that influence customers and products. It is owned by the individual and is renewable. For the purpose of this study it is seen as the visionary and wise leadership, competent managers, and expert knowledge workers of both trans-national organisations and African communities applying their cultural understanding, trans-disciplinary insight and awareness to make wise decisions and appropriate actions.

The 'desired outcomes for Africa' means the expected outcomes including peace, freedom, transformative growth, self-empowerment, innovation, competitiveness, equilibrium and convergence towards the ultimate outcome of emancipation and revival of Africa (the African Renaissance) as a result of the convergence of indigenous and modern global knowledge frameworks and the congruence of intellectual capital and social capital.

Research of these variables not only requires a literature study but also fieldwork in a suitable African cultural context according to a conceptual scheme, consisting of operational definitions of variables identified in literature related to the specific sub-problems. (See Appendix B for the Conceptual Framework used for field research and Appendix C for the questionnaire used during field research.)

1.8 DELIMITATIONS OF THE STUDY

1.8.1 THE LEVEL OF ANALYSIS

The study of KM can be done on different levels, ranging from the micro-level, involving computer tools (which can be used to enable the computerised management of knowledge) or on the level of the organisation where formal structures attempt to manage knowledge as part of general management. It can also take place on community level where certain cultural practices are applied to muster knowledge for the advantage of the community.

KM can also be on the level where societies, nations, or trans-national entities interactively manage knowledge to participate in the dynamic international political arena. It was decided that a study on the trans-national level would serve the purpose of this study, which is to create a theoretical model for the management of knowledge, including indigeneous knowledge, to achieve desired outcomes for Africa while promoting the African Renaissance. A study on trans-national level implies not necessarily nation states as determined by colonial borders, but interaction and intra-action of nations as societies and epistemes. Such an approach to internationality would negate the artificial influence of international borders and boundaries between societies.

Conflict management in Africa was specifically identified as a subject because of the transsocietal and trans-disciplinarily nature of conflict management and the need for innovative solutions in this regard. Furthermore, learning from the study of conflict as phenomena proved to be suitable for extrapolation to other disciplines.

To serve this purpose, Africa is seen as an episteme. The empirical and normative knowledge foundations of the indigeneous knowledge together with the knowledge base of the trans-national organisations are seen as 'inputs' of the system. The interactive communication during which a power equilibrium, consensus, trust and synthesis of interpretation is sought is seen as the 'process' of the system. Meeting the expectations of society and the trans-national organisation were seen as the 'outputs' of the system. The cyclic nature of a system is suitable to identify what interventions are required to break a cycle of continuous cause and effect that results in dysfunctions in African society and disparity between African society and the rest of the global society.

1.8.2 THE RESEARCH UNIVERSUM

Exciting developments in the international world of knowledge served as encouragement to select the Great Lakes region as the universum for research. In the DRC, the signing of the Pretoria Minutes in October 2002 brought a new dimension to the international political dynamics of the Great Lakes region. Extensive armed hostilities diminished with the withdrawal of foreign belligerents. Peace keeping efforts intensified. With the extension of peacekeeping efforts came the activation of modern knowledge systems to support the effort.

Furthermore, the ongoing quest to end the internal war in Uganda and collective efforts by various internal and global role-players to find solutions, presented an opportunity to research KM in a conflict situation. Moreover, the 1994 genocide in Rwanda, and the different knowledge claims on the causes, course and outcomes of the event, called for in-depth investigation on how these knowledge claims are managed to prevent repetition and to restore society. The dynamics of the internationalized peace processes and political development in the DRC, Burundi, Rwanda and Uganda added to the suitability of the Great Lakes region for further research into KM practices in Africa, and especially KM in a conflict situation.

Subsequently, the Great Lakes region of Africa (the DRC, Burundi, Uganda, and Rwanda), was chosen as the general universum of the study because of the number of unresolved or managed conflicts in the area, which became a characteristic of the area, and KM activities

related to conflict. The Great Lakes region proved to be suitable universum from which knowledge can be obtained for generalization or transferability to the rest of Africa in the form of model solutions.

1.8.3 THE RESEARCH POPULATION AND SAMPLING

The researcher seeks the research to apply to African society in general and the trans-national organisations involved in Africa. Therefore, the results of the research have to be transferable to the research population as a whole.

The increased involvement of trans-national organizations in the Great Lakes and the diversity of people also made the selection of sampling easier. Samples of leaders, managers, and experts within the communities (community leaders, businesspersons, academics, politicians and senior officials) who are involved in KM for conflict resolution, interacting on inter-societal level was selected. This implies that the conflict management structure of Africa with relation to the Great Lakes region, with the accompanied KM structures, had to be explored to determine the exact samples that could provide sufficient data. Subsequently extensive exploration of research opportunities in the Great Lakes were performed since 2003.

It was found that the characteristics of the different structures diverge to such an extent that probabilistic sampling would serve no purpose, especially in view of the dichotomy of traditional conflict resolution practices and Western models.

Therefore, non-probabilistic sampling to identify specific units of analysis on theoretical grounds and judgement sampling was used. Units that were seen by the researcher as suitable for case studies of specific trans-disciplinary, cross-cultural, trans-societal KM practices, that would answer the research problem and test the propositions as identified in the conceptual framework, were selected.

Samples within the following units of analysis were selected that meets the criteria for selection:

- The African peace and security architecture and NEPAD
- The International Criminal Tribunal for Rwanda

- The Gacaca Court System in Rwanda
- The Traditional Acholi Conflict Resolution System in Uganda

1.9 METHODOLOGY

Qualitative methodology was followed because this study is based on developing an in-depth appreciation of structures and processes of knowledge creation and aimed at developing an important account of how people view their world in social reality. This methodology would require the transcending of boundaries even beyond the empirically observable and understanding of the tacit. Moreover, the methodology needs to address power disequilibrium between urban elites and the rural periphery and between Africa and the northern hemisphere, a conscious movement away from neo-colonialism, marginalisation of societies, political dogma, the selfish advancement of economic interests and contempt for indigenous cultures. The methodology therefore requires qualitative research, breaking out of the structured and limited way of conducting scientific research. Research methodology requires consideration of empirical practice and logical procedure, discarding an apathetic approach to values and value systems and the notion to dichotomise and analyse knowledge in Africa into meaningless propositions. The methodology therefore was not to compare practices and structures, but to look for what principles and practices could compliment each other instead of forming opposites.

1.9.1 THE MIT APPROACH TO THE STUDY

Nicolescu (2001) confirmed that the logic of the included middle could be adequate for complex issues in the educational, political, social, religious, and cultural arenas. According to Gutto (2004) the notion today is to break out of structures in pursuit of new knowledge. Multi-disciplinary and trans-disciplinary approaches are increasingly being tolerated. In the multi-disciplinary environment experts look at specific knowledge areas to get solutions, in the inter-disciplinary environment different inter-connected and inter-dependant disciplines research and report to one convergent point in order to create the understanding of phenomena. The trans-disciplinary approach respect knowledge systems but disrespect boundaries. Knowledge systems are close- connected and inter-active while sensitivity exists for different approaches, acknowledging the limitations of different disciplines. Holistic thinking and creativity is allowed to explain and find solutions.

Against this background, it was found that one single discipline could not make adequate contributions to the study, due to the notion of traditional disciplines to specialise. The separate treatment of disciplines did not lead to something new, and only reinforced existing paradigms about Africa. Furthermore, binary logic was not sufficient to encompass the purpose and scope of the research. Political science, and specifically sub-disciplines like strategic studies or conflict studies are too specialised and 'belongs' too a community of experts, despite the multi-disciplinary nature of these fields. Disciplinary research tends too adress only one level of reality. This study confronts a complex array of realms.

The study is therefore also multi-disciplinary in the sense that research from several disciplines converges in the end to enhance understanding of knowledge in Africa. The research required interaction with the legal fraternity, epistemologists, educators, sociologists, anthropologists, and management scientists. Individual contributions assisted in the solving of a common problem as required by this study.

Moreover, the study had to be trans-disciplinary, in the sense that it consciously transcends boundaries of conventional academic disciplines in order to create a new paradigm. As the study seeks to deal with the problem of dysfunctions in contemporary society, the use of the MIT approach enabled the researcher to move beyond dichotomized and divisionary thinking into the space that lies beyond all discipline in the search of the wholeness of knowledge together with the harmony of our being and the understanding of the present world.

1.9.2 COLLECTION OF DATA

The epistemological and methodological basis for the research was to access the different sources of knowledge available in diverse libraries, participant observation including semi-structured interviews and participation in focus groups of KM experts.

Apart from the University of South Africa library, literature was obtained from the University of Alexandria in Egypt, the USAID library in Gulu, Uganda and the specialist ICTR libraries in Kigali and Arusha. Local literature published in Uganda, Kigali and Arusha and the Internet was consulted. Insight was gained through participant observation and participation in communities of practice involved in KM for conflict resolution. Main events include

attendance of 'The Fifth Annual International Conference on Knowledge, Culture and Change in Organizations' in Rhodos Island during June 2005; and the 'Development Bank of Southern Africa (DBSA) KM Africa Conference 2005 in Johannesburg, South Africa, 1-4 March 2005' and the election process in the DRC during 2006. Participation in the events provided valuable practical experience of principles and practices discussed in this study. Eventually semi-structured interviews with key informers, to find what is in the minds of the people involved in the selected units of analysis through field research, proved to valuable sources of data.

The research methodology was intended to access the worldviews of diverse sources from different cultures. The ultimate aim was to present a body of knowledge, which can be accessed by all who can benefit from it. In achieving this aim, the autonomy of diverse worldviews and philosophies of life is recognised and it is accepted that answers to question may be diverse. This methodology proved to be accommodative of diverse epistemes and worldviews and ensured the universality and holistic nature of collected knowledge.

This methodology is sensitive to the different knowledge foundations of different cultures and reflects an awareness that the wisdom embedded in the cultures involved is not necessarily 'scientific knowledge' as seen from a Western worldview, but an empirical foundation of all knowledge is assumed.

It is also assumed that 'truth' depicted by one or even a few epistemes can not be claim to be universal or holistic and tend to be ethnocentric or biased in favour of a particular culture or civilisation which attempts to establish domination of over other modes of knowledge by declaring it to be 'unscientific'.

It is accepted that scientific knowledge is just one event in the evolution of society and that the development of hermeneutics, structuralist, post-structuralist, and post modernist paradigms provides more flexibility to the researcher. To follow this methodology means the synthesising of all forms of knowledge through discourse, in a search for understanding. Moreover, the value of narrative to experience the wholeness of lived experience in particular time and space by a specific culture was realised.

The following techniques were used for the pilot study:

- <u>Content Analysis</u>. Empirical literature related to KM for conflict resolution in the total universum was analyses according to the conceptual framework.
- Preliminary Exploration. A small-scale study of the total universum involving observation and semi-structured interviews to identify key informers and focus groups for the study of indigenous KM for conflict prevention.

The main investigation involved:

- Content Analysis. An analysis of literature available in East Africa and published by East Africans on indigenous conflict prevention methods with specific reference to conflict resolution in Uganda and methods used in finding justice in Rwanda after the 1994 genocide (the Gacaca court system and the International Criminal Tribunal in Rwanda). The findings of the analysis provided specific indicators to compile questionnaires for the practical fieldwork. (See Appendix C for Field Work Questionnaires)
- Participant Observation. Interpretative interaction with people involved in the selected cases was performed during fieldwork in DRC, Rwanda, Uganda and the ICTR in Tanzania. In interacting with the practitioners of traditional knowledge in Acholi and the ICTR, specific principles and practices that would be valuable for practical solutions elsewhere, were identified.
- Interviews with Key Informers: Qualitative semi-structured in-depth interviews were conducted with selected specialists, professionals, and members of the communities and organisations, focussing on KM activities related to the specific conflict management cases. Specific propositions were tested and specific answers to questions provided valuable data.

1.9.3 TREATMENT OF THE DATA

In this study, to attain a trans-disciplinary and holistic result, a certain epistemology that mediates between epistemology and political science was required to access the knowledge embedded in African knowledge systems. A philosophical, theoretical and practical paradigm

to the study of the the nature and scope of the concept knowledge, African knowledge and Knowledge in Africa had to be formed.

Subsequently this study moves from a philosophical and theoretical paradigm (Chapters 2, 3 and 4), to an operational framework through which methods are made operable, determined by the epistemological field of specific cases reflecting interaction between the different epistemes related to African knowledge systems (Chapters 5, 6, 7 and 8), to providing model solutions (Chapter 9).

Analysis and interpretation of the content of literature involved both inductive and deductive logic. Deductive logic involved following a logical systematic sequence explaining the general statements found in philosophy and theory of knowledge, knowledge in Africa and KM in terms of the particular research problem and sub-problems. Inductive logic involved identifying the causal relationships amongst variables that would answer the research problem in terms of general statements about causality. To illustrate these causal relationships a conceptual framework was compiled (see Appendix B).

It was after the conceptual framework was compiled that the researcher took personal control of the data to develop new theory and to expand the knowledge base in the field of humanities, political science, and African Studies, through field research.

For the field studies abductive logic was used for the interpretation of the data, which implies listening and observing different views expressed by different experts and actors to explain how discourse amongst people can contribute to understanding of phenomena. The logic of abduction required exploring, close interaction with the research population, listening to alternative views and understanding of the internal meaning that participants in the social realm (African society and the trans-national organisation) assigns to their world. Abductive logic involved a special creativity to generate a new account of the way in which reality is structured by role players beyond just reproducing meanings expressed by participants. This form of logic enabled the researcher to identify themes, patterns, and trends and specific indicators about knowledge claims in the Great Lakes region and how it is managed for conflict prevention. Through abductive logic, new principles and practices that should be addressed in a new conflict prevention model for trans-national organisations in Africa could be derived with specific reference to the use of indigenous knowledge.

Finally, by way of conclusion, the propositions of a new model are transferred into the business world and generalisation to other geographical areas in Africa.

1.9.4 ETHICS

Ethics refers to what is considered acceptable or justified behaviour in the practice of research. Ethics is closely related to access, the way in which researchers negotiate and obtain entry into the lives of people they wish to study. (Romm 2006, 28).

Ethical concerns were addressed by preventing at all cost that people feel 'used' through the research and by being accountable to those studied and to other audiences. Confidentiality and trust had to be maintained in an environment where it was not assumed. Choices had to be made *in situ* on how to proceed with data collection, avoiding transgression into what society required being confidential.

It was easy to gain access to those who felt themselves aligned to the researcher or who shared the same interests. However, care was taken to challenge their views together with the views of all the other participants in the research process. The researcher did not become involved in the practices of others, and therefore was able to maintain a suitable distance from where critical intelligence could be applied. In the end, ethical requirements were maintained by being what the research population need the researcher to be: A seeker of practical solutions for the revival of Africa.

1.9.5 PROBLEMS EXPERIENCED AND LIMITATIONS TO THE STUDY

Published literature dealing with traditional conflict resolution in Acholi is few in comparison to papers discussing wider issues of KM for CMG. The availability of good material that adress the theme seems to be very low. The most valuable papers were availed by NGOs, the Catholic Church and academic institutions, of which some of them tend to adress Mato Oput at nothing more than 'Power Point depth' as if it is the ultimate model for finding resolution to conflict. It is also accepted that the best-published material had not yet been translated into English.

This lack of easily available information on traditional ways of conflict resolution in Acholi may reflect a widespread ignorance among trans-national organisations about traditional approaches so much needed to reinforce approaches in conflict resolution. With limited resources available for research in remote areas such as Gulu and Kitgum some important documents may have been overlooked. It is also an indication of the lack of accessible tangible knowledge, which could be used by organisations to make decisions that are more informed and actions, and the continued reliance on narratives of the collective memory of the oral culture.

In Rwanda, it was found that the system is still closed and characterised by the notion to provide information to the researcher to influence and perpetuate official views. It was also experienced that the researcher on a 'shoestring' budget enjoys lesser status and access to key informers than well funded researchers from governments and NGOs, who are willing to compensate financially key informers. The researcher had to overcome these limitations through creative persistence.

A further limitation to the study is that the specific case studies were not subjected to a comprehensive comparative analysis between the different systems presented by the traditional system of the Acholi, Gacaca and the ICTR. These specific cases were used to identify principles and practises that would contribute to collectiveness in a middle ground between systems and not to compare the procedural functioning of structures.

1.10 FRAMEWORK OF THE THESIS

The study is structured in order to form a coherent deployment of arguments from the initial questioning of the philosophical and theoretical basis of knowledge and KM, to proposing a plausible theoretical model for the management of knowledge in Africa and African knowledge in order to achieve the outcomes the people of Africa desire. Arguments are based on an analysis of knowledge in Africa, explaining the articulated outcomes of the 'African Renaissance' and investigating KM practices in Africa.

In Chapters 2 (The Concept Knowledge), Chapter 3 (Knowledge Management) and Chapter 4 (African knowledge and knowledge in Africa) the findings of a literature study is presented. The results of a further literature study are presented in Chapter 5 (KM for the revival of Africa), to determine what outcomes the people of Africa desire and what current initiatives

are in place to achieve that. These chapters form a coherent whole and culminate in a conceptual framework as guide for field research (Appendix A).

Chapter 6 is a report on a pilot study that was conducted on KM for conflict prevention, resolution and management to evaluate the hypotheses and conceptual framework and to focus of the main study. During exploratory participant observation in the Great Lakes region six interactive realms of KM in Africa were identified.

In Chapter 7 and 8, the scholar continues to report on the main investigation by presenting the fieldwork done on case studies on how knowledge is managed by using IKS in Africa. Principles and practices identified during field research on the traditional methods of the Acholi (Chapter 7), and the management of knowledge by the Rwandan society (Chapter 8) for reconciliation and conflict prevention, are offered as basis for model development. The purpose of the different case studies is not to compare different systems, but to discover principles in practices from village level to the level of the trans-national institution that could be made applicable to a new model.

Chapter 9 involves the presentation of a Trans-dimensional KM Model (TDKM-M) for the management of indigenous knowledge for conflict resolution. The working of the model is described and explained, and its suitability for the management of knowledge for conflict resolution is evaluated. The theoretical model implies the creation of a new theory on how embedded knowledge in Africa can be accessed and managed, thus not limiting the study to description and explanation, but also moving towards the prediction of KM needs in Africa during the 21st century and an effort to offer practical recommendations.

CHAPTER 2: THE CONCEPT 'KNOWLEDGE'

There is an infinite sphere, of which the centre is everywhere and the circumference nowhere. In the order of nature, the human brain holds the same place, as does the body: all that it can achieve is a vague apprehension of the centre, without any hope of ever knowing either the source or the totality. -Blaise Pascal

2.1. INTRODUCTION

Before the characteristics of knowledge in Africa can be researched, it is important to understand what 'knowledge' is, and what kind of manifestations must be looked for during the research process. If dictionaries are scrutinised the following explanations of the noun 'knowledge' are found:

- To know; intellect; foresight; revelation; wisdom; information; sorcery; publicity; discover; skill; erudition and epistemology.²
- Facts, information, and skills acquired by a person through experience or education; the theoretical or practical understanding of a subject, what is known in a particular field or in total; facts and information, awareness or familiarity gained by experience of a fact or situation.³

However, dictionary explanations are not sufficient for the requirements of scholarly research: operational definitions are required. The purpose of Chapter 2 is therefore to discuss the attributes of the concept 'knowledge'. In Chapter 2, the knowledge domains are discussed together with other concepts such as phenomenology, the hermeneutic circle, structuralism, knowledge within a system. The concept of holistic knowledge is introduced.

² Kirkpatrick, B. 1987. The Authorized Roget's Thesaurus of English Words and Phrases, London: Penguin Group

³ Simpson, J. (ed.) 2005. The Oxford English Dictionary. London: Oxford University Press

2.2 WHAT IS KNOWLEDGE?

2.2.1 SPIRITUAL KNOWLEDGE

On the spiritual level, Sri Krishna proclaims that after many births and deaths a person who is knowledgeable surrenders to God and knows God, who is the Cause of all causes (Bhaktivedanta Swami Prabhupada, 1984, 54). In Buddhism, a similar approach to perfect knowledge is maintained. According to Chah (1980, 44) there are two types of knowledge: knowledge of the worldly realm and knowledge of the spiritual or true wisdom. If we have not yet practised and trained ourselves, no matter how much knowledge we have, it is still worldly and thus cannot liberate us. The Holy Bible (Genesis 2:9) describes knowledge symbolically as a distinction between good and evil. King Solomon also expressed himself on the beneficence of wisdom when he said (Proverbs 4:5-7).

'Get Wisdom, get understanding: forget it not; neither decline from the words of my mouth. Forsake her not, and she shall preserve thee; love her and she shall keep thee; she shall bring thee to honour. Wisdom is the principle thing; therefore get wisdom.'

In Christianity, the emphasis is on the working of the Holy Spirit, although Christ himself does not express himself clearly on worldly knowledge. The Prophet Muhammad is clearer on the issue:

'Acquire Knowledge. It enableth its possessor to distinguish right from wrong; it lighteth the way to heaven; it is our friend in the desert; our society in solitude; our companion when friendless; it guideth us to happiness; it sustaineth in misery; an ornament amongst friends and armour against enemies'

Thomas Aquinas (1225-74) was probably the most influential philosopher of the medieval period, focussing on religious philosophy. He sought to reconcile the Christian faith with the philosophies of Aristotle, which were taught in European universities during this time. The cosmological arguments of Aquinas were based on observation of the world and the argument of the existence of God as the 'unmoved mover' and the 'uncaused cause'.

The view of North (1996, 198) is that humankind has risen to further its knowledge through impressions received from a 'higher mind', through clairaudient and clairvoyant

manifestations indicating that humans have arrived at their present state through paranormal happenings. He discusses the mystical experience in the context of the media-conscious world of today and concludes that we have become unable to conceptualise a wider worldview. North found that at the root of all knowledge ever devised by humankind there has been the axiom, an intellectual and self-evident truth expressed by a particular culture based on emotions that cannot be rationalised by logic. Meaning has to be sought through contemplation and the deeper mind where man and knowledge are unified.

2.2.2 PHILOSOPHY

In Chapter 1, it was asserted that original human knowledge developed since the birth of humanity in Africa, the 'Cradle of Humankind'. The earth was first colonised from Africa and then later re-colonised by Homo sapiens, migrating from Africa to the rest of the planet.⁴ As part of this process the Greek knowledge systems originated in Egypt where most Greek scholars, including Aristotle went to study. In the process, he adopted the Egyptian concept of creating order.

Philosophers have for centuries distinguished between two kinds of knowledge: *a priori* and *a posteriori* knowledge. A priori knowledge is knowledge gained or justified by reason alone, without the direct or indirect influence of any particular experience (experience usually means observation of the world through sense perception). Generally speaking rationalists believe that there is, while empiricists believe that all non-trivial knowledge is ultimately derived from some kind of external experience.

A posteriori knowledge is any other sort of knowledge of which the attainment or justification requires reference to experience, also called empirical knowledge. One of the fundamental questions in epistemology is whether there is any non-trivial *a priori* knowledge.

The Greeks adopted the view that reason was under individual control and that knowledge constitute those claims a philosopher thinks are ultimately defensible, while opinion and belief constitutes claims for which some justification is possible, but that are not completely defensible. The Greek philosophers emphasised human reason for the solution of problems.

⁴ This process is discussed extensively by Oppenheimer, S. 2004. Out of Africa's Eden: the peopling of the world. Jonathan Ball Publishers, Johannesburg.

In this regard, the human mind is an instrument for organising and evaluating human experience.

According to Plato (428 BC - 348 BC) in his work *The Republic*, opinion is clearly different from knowledge (478.a). A distinction is also made between knowledge, thought, belief and imaging (534.a), with knowledge and thought on the level of intellect and belief and imaging on the level of opinion.

In *The Metaphysics*, Aristotle (Warrington 1994, 51-52) said that by their very nature men feels the urge to know. The human race lives by art and science and man derives experience through memory. He distinguished between art and experience. Knowledge is an art rather than being based on experience. Somebody with experience does not necessarily know why something is like it is, and such a person is more directed to utility. The proof of the knowledge of a person is the ability to teach and to master the art of transmitting knowledge to others. Aristotle described wisdom as always knowing the cause of something. Thus, wisdom is the knowledge of principles and causes. Wisdom does not rely only on sense perception, which cannot explain the reason why something happens.

Aristotle (Smith 2000) explained human knowledge and distinguished between sensation, thought and desire. *Sensation* is the passive capacity of the soul to be changed through contact of the human body with external objects. In each sensation, the organ of sense give rise to the soul becoming potentially what the object is in actuality, resulting in information. (On the Soul II 5).

Thought is the process of manipulating forms without any contact with external objects at all. Thus, thinking is independent of the objects of thought, from which it abstracts the form alone. Even the imagination, according to Aristotle, involves the operation of common sense without stimulation by the sensory organs of the body. Although all knowledge must begin with information acquired through the senses, its results are achieved by rational means. Transcending the detail that was sensed, the soul employs logic to recognize the relationships among abstract forms. (On the Soul III 4)

Desire is the origin of movement toward some goal. Every being is capable of responding to its own internal state and the state of what is external, to alleviate the sensed absence of

pleasure or pain. Even actions taken as a result of intellectual deliberation produce motion through the collateral evocation of a desire. (On the Soul III 10).

René Descartes (1641) rejected old assumptions and teachings and focussed on the strict reasoning of mathematics and logic to arrive at basic truths. Descartes suggested trusting only that which is clearly seen to be beyond any doubt. He reconstructed human knowledge piece by piece to remove the possibility of doubt. Descartes asserted that human thinking (mind) is quite distinct from the body, the existence of a God or the existence and nature of the external world. Descartes suggested that nature teaches us that humans have bodies in need of food, that mind and body are connected, and that there are external bodies or objects. René Descartes argued that the universe had no human purpose. It was simply governed by physical laws. Humans should do their best to ascertain these laws in order to understand that purpose. This search was to establish 'laws' that were indifferent to human endeavour and feelings. According to Thompson (2006, 16) the arguments of Descartes presented the start of modern philosophy and set the agenda for epistemology.

According to Wilson (1996), the 'age of reason' began with Isaac Newton during the second half of the seventeenth century when scholars expected that all problems would be solved by the acceptance of a few axioms derived from observations of phenomena, and the use of mathematics. Rationalism characterized the 'age of reason', accepting careful, accurate observation and true reasoning as the only way to proper beliefs. It opposed superstition (ignorant beliefs or practices based on fear or mistaken feelings of reverence), and questioned authority. Newtonian thought concluded that only scientific and materialistic methods could be used in the pursuit of knowledge. The 'Philosophes' had a critical attitude toward any part of orthodoxy, especially orthodox religion. They did not believe in miracles and believed that the only reliable road to knowledge of God's plans was through science, not religion, through observation and experiment, not dogma and revelation.

Gotshalk (1969, 10) asserts that human beings are governed by ends and values. Superior knowledge of things, a confused unscientific knowledge of what is good, is sought by human beings. Consequently, numerous substitutes for intellectual effort exist, e.g. magic, witchcraft and superstition, but do not provide the certainty of intellectual inquiry. The supreme form of intellectual life is philosophy, exercising cognitive powers as far as one can reach. This inner excellence gave philosophy such high stature as the apex of awareness.

According to Oguejiofor (2007) philosophy appeared on the 'shoulders of Greek genius' moving North into Europe, supporting scientific advancement and the highest level of humanity, testing the levels of humanity. The nation that is heir to the greatest philosophers ended up producing Nazism, unleashed on the rest of humanity through imperialism. Today philosophy is fast losing its unqualified description and broad minded thinkers are finding the truth in the reality that exist in the regional philosophies of India, China, the West, Latin America and Africa, as part of a whole philosophy. African philosophy joined other regional philosophies in demanding a hearing in the intellectual world. African philosophy is influenced by the legacies of Western philosophy. While the enlightment underscored the importance of reason against prejudice, authority, tradition and the free reign of thought and reflection, the thinkers of this era asserted superficialities like colour as the essential characteristics of humankind.

2.2.3 MODERN KNOWLEDGE CONCEPTS

Most recent literature on knowledge refers to concepts such as artificial intelligence (AI) and neural computing related to computer science. AI uses computers to perform some of the functions of the human brain. It works on the principle of knowledge and response. The computer stores memories and is programmed to respond to these memories. The bigger the memory capacity, the more it can resemble human thinking. Neural computing tries to produce a computer that works like a human brain. It programs itself and learns from its environment. (Thompson 2006, 102).

Dreyfus (1986, 67) criticised AI based on the philosophy of Heidegger and argued that human activity is a matter of skilful coping with situations and presupposes a background of all the facts about society and life in general in order to act. This is impossible, because new facts are continuously emerging and are infinite. A person has to select which facts are relevant to the decision. It is impossible to provide enough rules and facts to fill out the background to a human decision.

Since this criticism was published, there has been a phenomenal rise in the power and sophistication of computers and their impact on commerce, communication and society. Today this fundamental issue concerning the relationship between computing and the human mind is still valid in a computer-sophisticated environment (Thompson 2006, 102).

A valuable input towards understanding what modern knowledge is, is that of Kluge, Licht & Stein (2001, 21), who introduced six characteristics of knowledge that distinguish it from other assets:

- Knowledge is subjective: it is dependent on a person's background and the context in which it is used
- Knowledge is transferable: it can be extracted from one context to be applied in another context
- Knowledge is embedded: it resides in an inactive and hidden form that cannot be easily moved or recreated.
- Knowledge can grow: it increases when widely distributed and only loses value when not shared
- Knowledge is perishable: it becomes outdated over time despite unpredictability.
- Knowledge is spontaneous: it develops unpredictably in a process that cannot always be controlled.

2.2.4 EVALUATION

According to theological views, knowledge is the result of divine inspiration and in the realm of spirituality, sometimes resides in non-human concepts of God. It also points to a set of moral principles for what are the right or wrong actions to take in daily life. Although religious concepts undoubtedly contribute to the knowledge of humankind, they do not clarify the concept of knowledge sufficiently for research purposes.

The philosophies of Plato, Aristotle, Descartes, and the 'Enlightment philosophers' reveal valuable concepts in attempting to formulate a work definition of knowledge. Especially the empiricist view (nowadays associated with positivism) of the observable environment external to the human being, including sense perception and scientific procedure, allowing for the use of conceptual imagination to infer knowledge from observable premises, contributes to the understanding of the concept of knowledge. Furthermore, the use of logic to understand the causal relationships between abstract concepts such as justice and society and justice and truth, are of importance, distinguishing these from mere beliefs and the imagination. Moreover, the importance of transmitting knowledge and the hint that action in the common good follows intellectual activity to ensure happiness, progress, freedom, justice and harmony among entities in a society, proved valuable to the study of knowledge and KM,

especially concerning societies in conflict or deprivity. However, the history of Western philosophy shows that reasoning also brought negative concepts like racism that spread through imperialism.

Today the emphasis is on holistic interaction to share knowledge from all parts of the world, enhanced by a modern view that knowledge is informed by cultural reality and the spontaneous transfer of knowledge to be used for the good of humankind.

2.3 THE SYNTHETIC-NORMATIVE KNOWLEDGE DOMAIN

Van Dyke (1960, 8-10) asserts that reason can contribute to knowledge prior and above knowledge supplied by senses but different cultures will produce different results. Normative statements express a conception of the desirable or value preferences. They address what ought to be. Ends, purposes and norms are expressed, based on will and emotion. Normative statements articulate ultimate values, not dictated by empiricism or logic. The normative domain can be viewed from the point of view of positivism or rationalism. Rationalism sees reason as the source of knowledge, despite the fact that different individuals may reach different results. Positivism implies the conception of what is desired or value preferences. Will or emotion drives positivism.

2.3.1 THE HIERARCHY OF NORMS

Fukyama (1999: 194-196) offers what he calls the 'Universe of Norms', which he illustrates as follows:

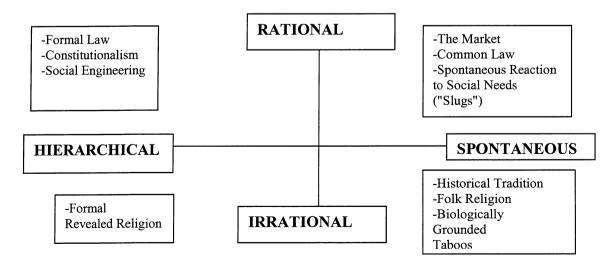


Figure 2.1: The Hierarchy of Norms

With this illustration, Fukyama asserts that norms such as religion, tradition and taboos tend to be irrational and, apart from formal revealed religion difficult to control and manage. Formal law and constitutionalism are rational, hierarchical and easy to control. Common law and reaction to social needs are rational, spontaneous and difficult to control and manage.

2.3.2 JUSTICE AND HUMAN RIGHTS

Plato asked what 'justice' is and what the value of justice is in itself (358.b). He argued that justice is seen as the harmony and functioning of each part of society. He wanted the rulers of The Republic to be philosophers, seeking truth rather than self-interest, if justice was to be established for all rather than in the interest of a particular section of the population. (Grube 1992). According to Thompson (2006, 197) justice for Plato was neither equality nor sectional interest, but a balance in which different people and classes worked together for the common good. Political debate centres on how to maintain social order while allowing maximum freedom. Law is framed because of the agreement of free individuals and people with basic human rights. Rights may be curtailed on the grounds of age, insanity or lack of skill (such as flying a plane) or in the case of prison sentences or legal injunctions. Fundamental rights can be retained but not always exercised.

Rawls (1972) address justice as fairness based on a social contract and the principles of liberty and distribution of resources. Liberty refers to equal rights for all as long as it does not prevent others from having a similar set of fundamental liberties. Distribution of resources should be such that the least advantaged in society receive the most benefit.

Nozik (1974) refers to justice as entitlement, and asserts that individuals are entitled to retain wealth that they have gained legitimately. Individual wealth is related to the work of many years or inheritance from family members who worked for it. However, historical legitimacy is difficult to establish.

Human rights, recognised internationally as an issue to be addressed in communities with cultural diversities, have led to the modification of international law and the standards of behaviour to be observed by states and individuals. The universality of human rights has been established and recognises in international law mainly through the aims and objectives of the United Nations as proclaimed in its Charter, which states that human rights are 'for all

without distinction'. Human rights are the natural-born rights of every human being universally and are not privileges. The Universal Declaration of Human Rights(art.1) adopted by the General Assembly resolution 217 A (III) of 10 December 1948, and The International Covenant on Economic, Social, and Cultural Rights, adopted and opened for signature, ratification and accession by General Assembly resolution 2200A (XXI) of 16 December 1966, affirm consensus on a universal standard of human rights.

The protection and promotion of universal human rights are asserted in the *Vienna*Declaration and Programme of Action, as adopted by the World Conference on Human

Rights on 25 June 1993, as the 'first responsibility' of all governments, regardless of particular cultural perspectives. According to Article 5:

'all human rights are universal, indivisible, interdependent and inter-related. The international community must treat human rights globally in a fair and equal manner, on the same footing, and with same emphasis. While the significance of national and regional particularities and various historical, cultural and religious backgrounds must be borne in mind, it is the duty of States, regardless of their political, economic and cultural systems, to promote and protect all human rights and fundamental freedoms.'

International standard-setting instruments address numerous concerns, including genocide, slavery, torture, racial discrimination and discrimination against women, rights of the child, minorities and religious tolerance. Political, civil, cultural, economic, and social human rights are to be seen in their entirety, are of equal value, and apply to everyone equally.

The 'Vienna Declaration' regards culture as a set of distinctive spiritual, material, intellectual and emotional features of society or a social group, and states that it encompasses, in addition to art and literature, lifestyles, ways of living together, value systems, traditions and beliefs. Respect for the diversity of cultures, tolerance, dialogue and cooperation, in a climate of mutual trust and understanding, are among the best guarantees of international peace and security. The declaration regards the process of globalisation, facilitated by the development of new information and communication technologies as creating favourable conditions for renewed dialogue among cultures and civilizations. However, it presents a challenge to

cultural diversity and implies commitment to human rights and fundamental freedoms, in particular the rights of persons belonging to minorities and those of indigenous peoples. Unfortunately, without a secure sense of identity amid transition, people tend to resort to isolationism, ethnocentrism, and intolerance of other cultures. As cultures interact and intermix, cultural identities change and this creates tension and conflict. The process can be enriching, but disorienting. (Nabudere 2006b,4-8).

2.3.3 EVALUATION

For the purpose of this study, a normative knowledge foundation is identified. The significance of values in society such as freedom, justice and human rights is found, which can be spontaneous or irrational, but also highly rational and formal. These values are accompanied by knowledge claims from a specific worldview that is formed through sense perception and observation of the environment over time.

The level of rationalism and positivism in societies and the limitations of abstraction place norms and values as knowledge claims in cultural context. The norms and values of a specific culture may sometimes be based on philosophy, understanding of the God-concept, esoteric beliefs, the tacit, or emotions that influence decisions and actions. In this case, the knowledge claims of a specific community consist of 'substitutes' for intellectual effort and play a role in the interpretation of events by society.

In the context of this study, understanding the worldviews of specific cultures and awareness that worldviews might differ or change are of the essence. Such awareness and understanding are derived from social communication, including communication involving the history of the society and current events involving narratives, symbolism or written text.

2.4 THE SYNTHETIC-EMPIRICAL DOMAIN

The 16th century saw a new universe of scientific discovery. Astronomers questioned understanding based on religious beliefs. Scientists such as Galileo and Newton successfully unlocked some mysteries of nature. A new thinking about the universe developed, allowing for careful observation, questioning accepted belief systems. New truths were to be found on astronomy, physics, and mathematics. Logical procedure was followed for gathering information and testing ideas.

2.4.1 THE SCIENTIFIC VIEW

Gregor (1971, 303-306) points out that moralists and theologians can only contribute to knowledge if they can convey meaning and offer criteria for the admissibility of that meaning as the truth. Gregor (1971, 72) continues by saying that normative argument is the product of impaired logic or faulted assessment, which fails to be useful for policy inputs or courses of conduct.

Empirical knowledge describes what happens in the real world. Facts can be verified through observation by using the senses, preferably using quantitative methods to ensure scientific claims. The method is descriptive in that it is factual about reality. Empirical statements therefore assert alleged truths about reality and deal with what 'is'. (Van Dyke 1960, 10).

According to Russell (1912), all knowledge is ultimately dependent upon experience, some knowledge is direct, or knowledge by acquaintance, and some knowledge is indirect, which depends on a description of a direct experience. For example, if one feels a pain, one is directly acquainted with it and knows about the pain, which is knowledge by acquaintance. If someone else reports that he is experiencing a pain, then one only knows this by virtue of his description of the pain, and not because one is directly acquainted with it.

Empirical knowledge claims presume a relationship between an assertion and the situation in the object world. Objects under scrutiny are concreta (directly observable entities) or constructs (not directly observable but theoretical entities that are indirectly observable, e.g. 'the state' or 'community'). The empirical world is described by scientific statements. Scientific knowledge is observable and is different from normative knowledge of what 'ought' to be and does not relate to the metaphysical. Scientists, like other people, may hold different beliefs about the normative but the work of scientists neither establishes nor contest such beliefs. Science comprises methods and procedures providing a systematically articulated and comprehensive body of maximally reliable knowledge claims that affords humans survival and adaptability by offering explanatory and prediction. Science is the employment of techniques that assign maximum reliability to propositions. (Gregor 1971, 151-154).

Empirical work in political science is characterised by generalizations based on correlations among variables deploying research designs. Experimental results can be projected to the

broader population, sometimes confirming or denying popular wisdom. Inductive study compels researchers to define variables, anticipate relations among variables and identify indicators. Empirical invariance can never be definitive or always correct, but is warranted to form the basis for prediction until new observations disconfirms it. Empirical knowledge is in principle subject to possible future refutation. (Gregor 1972, 50-51).

Appleyard (1993,258) articulates the Western view and points out the advantages of modern science by saying that science is a new way of doing things in a world that is nearly completely known, whereas 'primitive' communities can only construct myths about things they cannot see. Appleyard sees modern science exclusively as a product of the West. No other culture produced the same knowledge. Other wisdoms were not effective. People are distancing themselves from the West while benefiting from science. No Buddhist, Muslim or Confucian produced better ways of increasing crop yields, curing diseases or killing people. According to Appleyard, intellectual and technical innovation of the 16th and 17th century (mostly Greek and medieval science) has shown itself unable to co-exist with other domains, especially the methods of sorcerers, wizards and shamans. Appleyard reinforces his argument by citing Nehru.

'It is science alone that can solve the problems of hunger and poverty, of insanitation and illiteracy, of superstition and deadening custom and tradition, of vast resources running waste, of a rich country inhabited by starving people. How can we ignore science? The future belongs with science and those who can make friends with science.'

2.4.2 CRITICISM OF THE SCIENTIFIC VIEW

Wilson (1996) proposes that science is only one of several ideological devices for producing conformity, supporting the status quo and ensuring the sovereign privilege of one over the other: 'Science assigns truth', and is a calculated effort to dominate minds.

This view is supported by Crossman and Devisch (2002, 116), who claim that Western scientific knowledge-building is ruled by a group of people united by erected boundaries and oppositional thinking, which mirrors compartmentalised societies in which the knowledge is embedded. Eventually an inferior or incompetent 'other' is created. Majeke (2002, 149)

expands on this theme by pointing out that systems of thought were bludgeoned into indigenous communities without regard for how these would affect such communities.

Critchley (2003, 12) argued that the Greeks used reason as abstraction. This led to scientism and obscurantism. Philosophy in the European tradition endeavours to awaken awareness of the present and explains anti-scientism in the belief that the procedures of the natural sciences cannot provide a model for philosophical method and do not provide primary and most significant access to the world. The adoption of scientism in philosophy fails to grasp the cultural function of philosophy and the role that science and technology play in the alienation of people from the world through the manipulation of the instrumental thinking of peoples.

2.4.3 EVALUATION

For the purpose of this study, empirical knowledge perspectives are the result of human experience, sensing or observation of the environment. Furthermore, empirical knowledge claims are founded on actual participation or experimentation in the real world to ascertain concrete facts, not only relying on electronic media and human interaction to construct an image of a situation and observations that are made indirectly and from a distance.

The concept of scientism is also identified, which involves scientific explanations and prognoses that manipulates and dominates thinking and creates oppositional understanding along boundaries and a deficient worldview that knowledge in Africa and other indigenous communities is of inferior value and therefore provides no solution for the good of humanity. This perspective obscures interconnectedness with culture and the cultural context.

2.5 THE ANALYTICAL DOMAIN

Gregor (1971:306) asserts that analytical knowledge claims involve inspection of the logical properties of assertions or language, verifying synthetic truth statements. Analysts attempt to determine probability, or to correct it. Analytical knowledge is inferential truths, based on inductive evidence. Language develops cognitively to explain phenomena and predict outcomes and generalisations are made about operational concepts, employing observable indicators. If the premise is true, and a valid argument is formed, the conclusion is true. It therefore proves the premise true but does not add to existing knowledge.

If the conclusion does not provide what is implicit in the premise, there is no logical conclusion. If factors are locked into systematic and submissive relations with other factors and the gap is filled with propositions, not yet confirmed by observation but supported by logic and speculation, a theoretical system or conceptual schemata emerges which is seen as a knowledge product. (Gregor 1971, 51).

Fatowna and Picket (2002, 227) indicate that words and their meanings are vehicles for conceptual ordering of categories and relationships that constitute a worldview. They caution that knowledge and power have an inter-determining relationship and assert that the main entry into knowledge systems is language.

According to Nabudere (2002b) the recognition and development of African languages, through which Africans communicate, is the precondition for bringing about true human understanding and discourse with other cultures and civilisations.

Ong (1989) expands on the management of knowledge and verbalisation in primary oral cultures (cultures with no knowledge at all of writing). Discussing thought and its verbal expressions in oral culture, he points out the historic development of pristine oral culture into a writing culture, which permutated into a printing and electronic culture. He sensitises the researcher to an oral universe of communication or thought and the fact that the spoken word still resides in our lives. Primary oral cultures learn a lot, have great wisdom and learn by apprenticeship. Although a modern oral culture is sustained by telephone, radio, television and other electronic devices, it depends on writing and print.

Ong asserts that a primary oral culture has no texts. Data are organised by tying it to communication, and thinking is done in mnemonic patterns (using memory aids), shaped for recurrence, intellectualising experience. Putting the experience into words implements its recall and it relies on 'formulas' to implement memory. Speakers have nothing to go back to if they forget, except the mnemonic patterns. Oral societies invest a lot of energy in repeating what has been learned, establishing a highly conservative mind-set. However, many variants of a story can be found as part of managing interaction with a particular audience. Even cosmologies and beliefs can change because of intellectual discourse in an oral society.

Knowledge is conceptualised and verbalised with close reference to the human life-world. Stories of human action are used to store, organise and communicate knowledge.

Gregor asserts that analysis cannot discover truth. Analytical outcomes are only true in terms of language. Formal, deductive logic provides a guide to analysis of arguments and involves conclusions derived from premises but assert nothing about the real world. (Gregor 1972, 154).

For the purpose of this study knowledge claims from the analytical domain and the application of thought and logic to language is only valuable if interpreted in a specific cultural context. Formal analysis is not limited to the understanding of people of the language and culture in which the information was gathered, but knowledge of the idiom of the specific language and understanding of the cultural context are needed to access the particular episteme successfully. Language facilitates access to reality, especially the knowledge of oral communities, who have a wealth of knowledge embedded in their minds. Language, and how observations are explained by different language users, is a determinant of knowledge.

Ideally, analyses should be published to be scrutinised, but only if they contain the views of the illiterate who articulate their knowledge through narrative, which is not less logical or probable than the assertions of the Western-educated person who can articulate knowledge in Western writing. 'Language barriers' may prevent thorough analysis of a situation in remote communities and premises, definitions, generalisations, explanations and theories may be based on the limited understanding of the analyst because of difficulty in accessing communities or situations. Thorough analysis requires that language boundaries among communities be crossed during inter-cultural discourse to enhance understanding.

The literature reviewed revealed that norms and values are culture specific, based on empirical experience over a long time, and form the foundation of how individuals and societies view the world. The empirical foundation of normative knowledge claims implies that any knowledge claims cannot be accepted or rejected without thorough access and analysis.

A wealth of empirical knowledge is available from communities that prefer, owing to circumstances have little choice, to convey and share knowledge verbally. The challenge lies in accessing the data, which one can only do successfully by listening and recording, with discreetness in mind. Accessing data, obtained through verbal communication, requires understanding of the language and the worldview of the community.

When it is markedly different from an own worldview, the processing of data and analysis of information into meaningful synthesised knowledge, that avoids distortion and unnecessary dissecting, ensuring learning, becomes important. Trans-national organisations in Africa, which applies formal research, should therefore avoid forcing data into a corporate worldview markedly different from the accessed knowledge system. It is therefore important that research frameworks contain reliable indicators that provides for the gathering and analysis of indigenous knowledge, irrespective of the domain of origin. Such analysis should lead to the production of new knowledge (including explanation and forecasts) and actions to address the challenges of Africa.

2.6 TRANS-DIMENSIONAL UNDERSTANDING

Van Dyke (1960) suggests that the grounds of knowledge are empirical, normative and analytical. 'Rational' decisions are seen as those decisions based on value considerations, complete empirical information, as well as a thorough analysis of possible alternative methods or courses of action. Gregor (1972, 249-252) recognises that in collecting, processing, interpret and employing synthetic information, empirical analytical and normative components are essential. Political enquiry is a 'master art' and a unity of analytical, synthetic and normative concerns. For example, an ideology is a system of argued beliefs, having both empirical content and normative intent. Tacit knowledge and the rational are united in one knowledge enterprise, constituting a network in which internal cognitive strength and value outcomes are maximised. Schmidt (1992, 9) suggests that knowledge is a relationship between belief and the external (empirical) environment of the subject. No claims about the world could be assumed, because such claims are based on a cognitive process forming beliefs and the reflection that beliefs are justified.

2.6.1 PHENOMENOLOGY

Inspired by Descartes and others, G.W.F. Hegel (1807) introduced *phenomenology* as an approach to philosophy. *Dialectical phenomenology* begins with an exploration of phenomena (something that presents itself to us in conscious experience) as a means to grasp the absolute Spirit that is behind phenomena. Hegel declared that by understanding phenomena more fully, we can gradually arrive at a consciousness of the absolute and spiritual truth of Divinity.

According to Heidegger (1962) philosophy was not a scientific discipline, but more fundamental than science itself. Science is not the only one way of knowing the world and cannot necessarily find truth. The scientific mindset itself is built on a foundation of practical, everyday knowledge. Heidegger showed that a scientific view of the world ('scientism') derives from a prior practical view of the immediate environment that is already coloured by cognitive, ethical, and aesthetic values. Scientism (Husserl calls it objectivism) overlooks the phenomenon of the enabling condition for scientific practice ('life-world').

However, he warned that anti-scientism could lead to obscurantism and distortion. The critique of scientism within phenomenology does not seek to negate the results of scientific research; it only insists that science does not provide the primary and most significant access to sensing.

Heidegger argues that observable phenomena are not the foundation of being and introduced *existential phenomenology*, which is the phenomenological vision of a world of beings that must be bypassed to enable the finding of the Being behind all beings.

Edmund Husserl (1954) discussed *transcendental phenomenology* as an approach to philosophy that takes the intuititive experience of phenomena (what presents itself to us in phenomenological reflexion) as a premis and tries to derive from that the essence of what we experience. Husserl established a separate research field in logic, philosophy and phenomenology, independently from the empirical sciences. Husserl concentrated more on the ideal, essential structures of consciousness. He observed that the scientific environment could not be neutral to values because it was already tinted by cognitive, ethical and aesthetic

values. He called it the 'life world', which provided the enabling condition for scientific practice.

Today *transcendental phenomenology* is the study of the essential structures that are left in pure consciousness. This reasoning became the pattern on which rationalist scientists built their systems of analysis on the basis that they had self-evident *first principles* of demonstration. The rationalists asserted that something counted as self-evident if one knew it was true simply by understanding it, although these self-evident principles were themselves based on pre-understanding and a certain view of history.

2.6.2 THE HERMENEUTIC CIRCLE

Hermeneutics as a system of understanding can be traced back to its African origins in the figure of Trismegistus Hermes (merged identity between Hermes and Thoth, the God of esoteric knowledge and wisdom and seen as the author of the Hermetic texts and scriptures in which all knowledge was believed to be embedded). Hermeneutics involves the crossing of boundaries, the capacity to listen to the messages, interpret them, and pass them on to other listeners. (Heidegger 1971).

Hermeneutics as applied to sociology can be traced to the work of Max Weber (1864-1920) who saw social behaviour in the context of such variables as social class, group and subgroup memberships. In this context Heidegger initiated a philosophic dialogue in which he argued that 'discourse' was the way people communicated with one another. People expressed the way in which they understood the world. Communication was the process by which people shared and encouraged their intellect to belief that the world can be comprehended and that their experience can become significant. He added that interpretation in its highest form is first to listen and then 'to become a messenger of the gods oneself' in the tradition of Hermes. To achieve that is to stand in a hermeneutic relation to individual current being as well as to one's heritage as a human being. Heidegger also broadened the spectrum of hermeneutics to include the understanding of texts, including multimedia. This approach entails that texts, and the people who produce them, cannot be studied using the same scientific methods as the natural sciences. Texts are conventionalised expressions of the experience of the author. The interpretation of such texts will reveal something about the social context in which they were

formed and provide the reader with a means to share the experiences of the author. (Heidegger 1962, 204)

Gadamer (1989) developed the concept of hermeneutics based on the work of his teacher, Heidegger. In modern context hermeneutics means the interpretation and understanding of social events by analysing their meanings to the human participants and their culture. Contemporary hermeneutics emphasises the importance of the content as well as the form of any given social behaviour. The central principle of hermeneutics is that it is possible to understand the meaning of an action or statement by relating it to the discourse or worldview from which it originates.

Gadamer's (1976, 98-99) reference to the 'hermeneutic circle' demonstrates the relationship of the whole to the part and the part to the whole. According to this theory, it is not possible to understand any one part of phenomena until one understands the whole, but it also is not possible to understand the whole without also understanding all the parts. He argues that the present perspective of a person together with the knowledge and experience of that person is productive ground of understanding. Limits to understanding of other people can be transcended through exposure to discourses and linguistically encoded cultural traditions of the other people because their perspectives convey views and values that assist own understanding.

In this understanding, every explanation of one part became at once a discovery of the other, while the process of explanation remained at the same time a project of self-discovery. (Nabudere 2002b). Consequently, understanding for Gadamer was not the result of a scientifically reconstructed purpose, but instead a mediation between the immediate horizon of the interpreter and a new emerging one. He stresses the need for the 'fusion of historical horizons' as the best way of transmitting understanding between the different lived histories or experiences of different communities as the basis of their existence. Hermeneutics insists on both the cultural context as well as the historical contingencies of events as necessary in bringing about a true understanding of the different lived experiences.

Habermas (1987) attacked the principles of hermeneutics as conservative and advocated critical theory as an alternative. With the emphasis on criticising the culture of capitalism and orthodox communism Habermas focuses on the question of what cultural conditions are needed to make good intellectual work possible or how far economic interests and political

dogma can corrupt science and philosophy. He addressed 'critical theory' which includes all types of theory, including structuralism.

2.6.3 STRUCTURALISM

Structuralism is an approach in academic disciplines that explores the relationships between fundamental elements, upon which mental, linguistic, social and cultural structures are built, through which meaning is then derived. Structuralism became a popular approach in the academic disciplines concerned with analysing language, culture and society.

Lévi-Strauss (1958), influenced by information theory, considers culture a system of symbolic communication, to be investigated with methods used in the discussion of novels, political speeches, sport, and movies. The analysis of words reveals features that are real, in that users of the language can recognise and respond to them. In the study of kinship systems the ideal of explanation allowed a comprehensive organisation of data that had been partly ordered by other researchers. One possible way of finding a master order was to rate all the positions in a kinship system along several dimensions. An exhaustive collection of such observations might cause an overall pattern to emerge. However, this was analytical in appearance only. It resulted in a chart that was far harder to understand than the original data and was based on arbitrary abstractions. Furthermore, it did not explain anything and it did not offer the possibility of inferring the origins of the structure.

According to Lévi-Strauss a solution was to find a basic unit of kinship that could explain all the variations, displaying the qualities of structural thinking. The purpose of structuralist explanation is to organise real data in the simplest effective way. Structural explanations can be tested and refuted. A truly scientific analysis must be real, simplifying and explanatory.

Levi-Strauss insists that myth is language (and therefore analytical), because myth has to be told in order to exist and explains how the structures of myths provide basic structures for understanding cultural relations. Myth can be translated, paraphrased, reduced, expanded, and otherwise manipulated without losing its basic shape or structure. Myths from different cultures from all over the world appear to be similar because myths are not bound by rules of accuracy or probability, are both historical and timeless (therefore normative). Myths present certain structural relations, in the form of binary oppositions that are universal concerns in all cultures and form the basic structure for all ideas and concepts in a culture. In synchronic

groups of relations, patterns or themes develop. Structural analysis creates all possible variations of myths, as it enables the researcher to perceive some basic logical in mythical thought out of chaos. Levi-Strauss attempts to explain myths through logic and science and asserts that myths and science share the same basic structure of logic, implying that his method of myth analysis is scientific. (Klages 2005).

Michel Foucault (1970) examined the history of science to study how structures of epistemology shaped the way in which people imagined knowledge and knew things. The work of Foucault deals with what he has termed the 'archaeology' or 'genealogy' of knowledge production. In his view, knowledge is connected to power. The focus is upon questions of how some discourses have shaped meaning systems that have gained the status of 'truth', and dominate how human beings define and organize their social world and themselves while other alternative discourses are marginalised and dominated. He looks closely at the continuities and discontinuities between 'epistemes' (the knowledge systems which primarily informed thinking during certain periods of history) and the social context in which certain practices emerged.

Foucault (1970: xx) developed the concept of the 'discursive field" as part of his attempt to understand the relationship between language, social institutions, subjectivity and power. Discursive fields, such as the law or the family, contain a number of discourses with varying degrees of power to give meaning to and organise social institutions and processes, presenting modes of subjectivity. Foucault argues that the 'will to truth' is the system of exclusion that forms discourse and that tends to exert pressure and power of constraint on other discourses. Therefore, some discourses constrain the production of knowledge and some enable 'new' knowledge. The questions that arise within this framework are how some discourses maintain their authority, how some 'voices' are heard while others are silenced, who benefits and how.

Foucault explains the concept of 'episteme' as the fore-conception of any investigation in the search for knowledge. An episteme is formed beforehand through an 'inner structure of being' (the order of the episteme). The order is the inner law of things and the unseen network that determines the way they confront one another. Observation, examination or language creates order in the network. The world of being and 'symbolic disclosure' is produced by the order. This means that every speaker or investigator acts according to the

symbolic order of which he/she may be unconscious of in the activities within the given culture. The fundamental structures of a culture are those guiding its language, perceptions, interactions, practices and values. The hierarchy of practices establish for every man the empirical orders with which he will be dealing and within which he will be at home.

Today structuralism is less popular than approaches such as post-structuralism and deconstruction. Structuralism has often been criticised for being ahistorical and for favouring deterministic structural forces over the ability of individual people to act. As the political turbulence of the 1960s and 1970s began affecting academia, issues of power and political struggle moved to the centre of people's attention. In the 1980s, deconstruction and its emphasis on the fundamental ambiguity of language, rather than its logical structure, became popular. By the end of the twentieth century structuralism was seen as a historically important school of thought, but it was the movements it spawned, rather than structuralism itself, which commanded attention.

Fletcher (2001, 22) describes post-structuralism as the focus in which a dominant discourse becomes sustained in society, excluding other views. Certain voices in society become silenced or marginalised. It is then the responsibility of researchers to disrupt the dominant discourse by offering alternative versions of reality.

2.6.4 SYSTEMATIC KNOWLEDGE

David Easton adopts a synthesis of operations research, cybernetics, and general systems theory. A political scientist must examine the entire process of policymaking to understand the system better. A system is embedded in an environment and subject to possible influences from it that threaten to drive the essential variables of the system beyond their 'critical range'. The system must therefore be capable of responding in order to alleviate the stress it creates. To respond, authorities (those who can control the system) must be in a position to obtain information about what is happening so that they can react if desired or

Environment

Demands

The Political System

Decisions and Action

Environment

Environment

compelled to do so. A simplified model of a political system is offered by Easton (1965):

Figure 2.2: Easton Model of a Political System

The model offered by Easton is valuable to engage the research problem in the sense that it identifies the basic elements of such a system, making general systems theory applicable to political science.

According to Van Dyke, knowledge is systematic when it is organised into a pattern or structure with significant relationships. The concern for system means that scientists want to precede from the particular isolated facts toward knowledge of connections between facts, in other words, relationships (Van Dyke 1960, 113).

System theory focuses on the parts that will make an idea a whole and mould changes in a network of coupled variables. System theory is the trans-disciplinary study of the abstract organisation of phenomena, independent of their substance, type, or spatial or temporal scale of existence. It investigates both the principles common to all complex entities and the models that describe them. The composition of the system in the steady state remains constant, by creating forces that react against disturbance or stimulus from outside the steady state. To maintain itself in its steady state the system requires a constant supply of energy. The steady state ratio of the components depends only on the systems constants and not on the environmental conditions from where the stimulus comes. In steady state systems, values are always constant, but react to the inflows and outflows. Open-systems theory is applicable to living organisms. Systems analysis applies systems principles to aid a decision maker with problems of identifying, reconstructing, optimizing, and controlling a system, while taking

into account multiple objectives, constraints and resources. It aims to specify possible courses of action, together with the risk, cost, and benefits. (Rosnay, 2002).

The concept of the open system maintaining itself in a steady state represents a departure from the concept of classical physics, which has dealt, for the most part, with closed systems. A closed system attains a state of equilibrium with maximum entropy and minimum free energy and is unresponsive in that its initial conditions determine the final state of the system. A change in the initial condition produces a change in the final conditions. Open systems are open to their environment, and interacts with the environment. Open systems exchange material with their environment incurring changes in components. Open systems are highly complex entities, facing uncertainties and constantly interacting with their environment. Organisational components seek equilibrium among the forces pressing on them and their own responses to their forces. (Gordon & Milakovich 2002).

System theory includes cybernetics (Scrivener 2002), the theory of control systems based on communication between systems and environment and within the system, using loops in order to define the flow of information. Cybernetics emphasises feedback that triggers appropriate adaptive responses in a system. The fundamentals of cybernetics is the classification of concepts as patterns of change based on the assumption that complex systems can be studied as a whole, without specification of certain parts, to develop a generalised theory applicable to unanalysed states.

Deutsch of Yale University and David Easton of the University of Chicago are the leading representatives of the systems approach in political science. Deutsch describes government in terms of systems theory and the history of socio-political thought. Deutsch tries to translate the concepts of consciousness and will, memory and recognition into systems theory language, attributing it to the political system. A society receives information, 'learns,' makes decisions, adapts to its environments and develops by means of effectors units. (Lilienfeldt 1978, 213-217)

Van Dyke (1960, 162) calls the systems approach the 'esoteric' approach to politics, which deals with living societies. It involves inputs, outputs and throughputs (coded or un-coded). A system suffers strain and has feedback mechanisms. Elements must have enough in common to transfer knowledge. Knowledge of one element applies to the other. Knowledge in one system increases knowledge in the other. A system is to be viewed as a complex

whole as part of 'systematic empirical analysis'. The international system is an example of a system with states and sub-systems within states to be studied as an 'operating whole' without adopting the vocabulary of system theorists. Systems analysis aims at a very high level of generality.

2.6.5 HOLISTIC PERSPECTIVE

Holism is a term originally coined by Smuts (1926, 317-318) from the Greek word 'holos', which means whole. Holism is the ultimate synthetic, ordering, organising, regulative activity in the universe, which accounts for all structural groupings and syntheses in it. Synthetic unity or wholeness leads to the concept of holism as the fundamental activity underlying the view of the universe as holistic. Holism is a universe of whole making. The view of the universe as purely spiritual fails to account for the ethically and rational 'dark opaque character' of error, sin and suffering. Holism explains both the realism and idealism 'at the heart of things' and is a more accurate description of reality than one-sided world-views.

According to Wilber & Harrison (1978, 61-89) for the holist, reality cannot be explained by the application of universal laws, with successful predictions the only form of verification. An event or action is rather explained by identifying its place in a pattern of continued processes in the whole system. Recent attention to holism by philosophers of science has led to a coherent expression of its methodology. Holistic social scientists argue that social reality must be studied as a complete human system in its natural setting. Case studies, using the participant-observer method, are the most successful approach. Using this approach, researchers construct tentative hypotheses about parts of the system out of the recurrent themes that become obvious to them in the course of the research process. These hypotheses or interpretations of themes are tested by consulting a wide variety of data (previous case studies, survey data, personal observations, and so forth). Gradually, as socialisation proceeds, researchers become increasingly familiar with recurrent themes, concluding its plausibility. The holist proceeds to building a model, emphasising recurrent themes based on explanations of subjects or story telling and connecting independent elements to form a pattern. The model is therefore not hierarchical.

Holistic concepts are frequently (but not always) related dialectically: the development of mutually exclusive or opposing concepts are necessary for the validity or applicability of

each other or when the real theoretical problem is the interrelation between the two concepts. Holist theories serve to counterbalance the human tendency to be biased, one-sided and abstract. Researchers begin with some historically or empirically suggested theme and develop it until its limitations are evident enough to suggest an opposing theory. The use of holist concepts is continuously monitored through empirical observation. Holists recognise that theories are always tentative and subject to change, to be observed in particular case studies. Holists propose that we have an explanation for something when we understand its place in the whole, generalizing from empirical observation about the working of a system.

Nicolescu (1991, 109-112), based on the work of Jacob Boehme (1575-1624), concludes that modern science had to define itself through a break with traditional thought, which was locked in a institutional framework that was stifling and withering it. A single horizontal reality turned into a circle of chaos anarchy and self-destruction. However, this break is methodological and has been a condition for the full development of modern science. Contemporary science is international but 'its roots always remain anchored in the soil of its birth'. Science without philosophy and understanding of the signs of nature is self-destructive, while the mistrust or ignorance of tradition, philosophy and wisdom (the other pole) is equally destructive. The dialogue between science and meaning is characterised by an opening to being in the form of a trans-disciplinary cultural approach, creating space for free dialogue between the past and the present, and between all forms of knowledge, recognising and exploring what circulates between the different levels of reality in multiple, vertical and polyphonic dimensions.

2.6.6 EVALUATION

When literature on the interrelationship between knowledge domains is evaluated, it is found that knowledge is developed into holistic understanding and decision-making if claims from all knowledge domains are considered. It implies that not only formal analytical knowledge claims must be used for management, but that the empirical and normative knowledge claims of African society must also be part of a KM effort. A synthesis between knowledge from the analytical, normative and empirical knowledge domains must be found, whatever its origins, to be merged into new knowledge. Such a synthesis would require a 'fusion of horizons', trans-disciplinary interrogation of different levels and dimensions of reality or knowledge claims. The two 'horizons', which form an integral part of this study, is the scope

presented by the African knowledge system and the perspective of the trans-national organisation. The different levels of knowledge refer to how knowledge perspectives were subjected to empirical observation, analytical procedure and the application of normative wisdom, in other words the holistic knowledge foundation of knowledge.

When the literature on knowledge as a system is evaluated, it is found that systems theory is valuable for ordering facts into variable entities, allowing for the description of the effect on elements of the system if information is induced and flows through the system of interconnected units. In this context, Africa appears to be an open knowledge system that lacks sufficient energy to remain constant in view of external pressures, including the domination of knowledge inputs from the West. External knowledge inputs from other worldviews may be demanding but can also be supportive to create stability. History shows that Africa is an open system, which always interacts with its external environment and the external environment in turn interacts with Africa. Historically, disequilibrium persists between a dominant Western knowledge system and African knowledge.

This study also deals with knowledge inputs from outside the continent and the interaction in the flow of knowledge among continents, including Africa. In this regard, the principles of cybernetics are applicable to identify communications and the flow of information through systems and sub-systems and between sub-systems in Africa and between Africa and the rest and the world. Sub-systems in Africa, such as Regional Economic Communities (RECs), respond and adapt to the flow of information in the form of knowledge production, decisions and actions.

The systems approach can be made applicable to political entities such as continental, regional and state structures, as well as political parties and interest groups as part of a system. It means that systems analysis can be used to research how a political component receives its information, processes it into knowledge, and uses the knowledge product to develop or transform.

Systems theory also allows for approaching the knowledge systems of Africa in a transdisciplinary fashion, not limited to the interpretation of facts in the context of formal political entities in Africa, but also in terms of the expectations of African society and sometimes, intangible knowledge. It also enables the researcher to analyse the flow of information through the political system of Africa critically and observe it empirically, as well as the interpretation of the information to form new knowledge, and the effect it has on not only the environment external to Africa but also societies that remain excluded from the formal political process. Systems theory specifically addresses the transfer of knowledge between systems and within systems, including global systems, rendering it applicable to the question of knowledge in Africa.

Finally, research into knowledge as a system showed that every entity delivers an outcome, in the form of knowledge production, decisions and actions. Therefore, knowledge production in Africa must be managed to ensure that it result in decisions and actions that effect positive change (e.g. conflict resolution) in Africa and to maintain equilibrium with the dynamic global environment, avoiding control by that environment.

2.7 FINDINGS

The propositions of modern scholars confirm that knowledge is the result of personal experience, discourse during which humans relate to differing perspectives and their interpretation of experience. The essence of human knowledge is awareness and understanding, especially the understanding of phenomena and holistic perspective, transcending beyond dominant discourses.

The review of literature in Chapter 2 indicates that knowledge is the result of discourse among people using language and other symbols, crossing mental, cultural, and physical boundaries in a quest to understand phenomena in their world. Two dimensions of knowledge are identified, namely the level of the observable world in interaction with another knowledge dimension of an unobservable universe. The 'universal dimension' is encompassing, including the 'observable dimension'. The observable dimension consists of three overlapping domains, consisting of a normative knowledge foundation, empirical knowledge perspectives, and analytical knowledge assertions.

The normative knowledge foundation may contain cultural-specific values, belief in esotericism and the supernatural, emotions, as well as rationalist or positivist reasoning. People can claim to know the truth about phenomena according to abstract norms such as God, happiness, freedom, human rights, justice, and peace and relevant causal relationships

between such concepts within cultural context. Normative assertions cannot be rejected because they may be based on sense perception and interpretation of specific occurrences or phenomena over a long time, and therefore empirically founded, despite the fact that it may deliver faulty assumptions such as the superficial distinction based on physical features of people.

Alternatively, the knowledge perspective can be empirical and the result of personal observation, experience, socialisation or scientific experiment dealing with the observable environment (historical or current), following scientific procedure in a quest to understand phenomena. Empirical knowledge claims emphasise the inference of knowledge from an observable realm and the importance of transmitting knowledge. Modern literature shows that scientific procedure can be restrictive and prevent complete understanding beyond the parameters of modern science if the normative knowledge foundation is not considered.

The analytical mind will claim knowledge as the result of the analysis of concepts articulated in language and other symbols. Access to data will involve a framework with indicators that allows for access to the worldview of a specific culture, not rejecting any perspective. Processing of the data into useful information requires a synthesis of data into a meaningful body of knowledge that can be analysed, without dissecting the information into parts that prevent the explanation of causal relationships between phenomena in the cultural context of the specific episteme. Successful explanation of all phenomena in society contributes to new understanding and learning.

Holistic knowledge implies that knowledge in the normative, empirical, and analytical domains and both dimensions are all considered to form a synthesis that reveals a broader or holistic perspective. Literature suggests a system of continuous knowledge inputs, processes, and outputs in an enabling environment through which a continuous flow of knowledge can be observed. The flow of knowledge is characterised by interaction among knowledge dimensions and domains, continuously renewing knowledge, taking it from a level of sensing in an immediate environment, to a level of multiple perspectives and developing insight or understanding of phenomena within a whole, rejecting dominant discourses. The holistic perspective also accepts the ontological orientation that the world contains unobservable or tacit entities as part of a generative system, which produces observable outcomes.

Literature on holistic knowledge further suggests a network of discourse among knowledgeable people through technology, personal interaction, or traditional communication methods, transcending boundaries physically and mentally, sometimes claiming to access the unobservable world. Such discourse is constructive of a realm in which a synthesis of discourses becomes possible.

This study is about the fusion of knowledge claims in an attempt to understand the whole environment and part of the environment in African cultural context. The never-ending interaction of the traditional and modern knowledge foundation of African society, the flow of knowledge within African society and in interaction with the global world, the efforts to cross the artificial boundaries between levels and dimensions of knowledge about and by Africans in finding the causes of phenomena, are the focus of the study.

In all this the diverse knowledge claims of different cultures cannot be ignored, especially the marginalised or oppressed, whose knowledge inputs are vital to ensure complete understanding of the expectations of different cultures concerning the universal values of justice, human rights, and freedom in a social order where all people are entitled to live these values.

Against the background of the research problem, it means that to understand the challenges of Africa the 'episteme' or 'order of things' should be understood, especially if the 'symbolic disclosure' of such an episteme and the logic is perceived as 'mythical' African knowledge claims. Moreover, the power relationship between trans-national organisations and the community, as well as power relationships within communities and organisations, that enable or inhibit knowledge production, need to be managed. No knowledge input can be ignored when dealing with the knowledge systems of Africa. The interrelationship or synthesis of knowledge domains therefore calls for a holistic understanding in the analysis of African knowledge.

Furthermore, awareness and understanding includes the crossing of mental and language boundaries in order to understand the meaning of power structures and epistemes of specific societies or cultures, in order to transfer, share and disseminate knowledge across the cultural divide. Moreover, personal awareness and understanding of other worldviews may enable the human mind to transcend the divide between the observable world and the tacit universe in order to find a broader understanding that up to now has escaped the human mind.

The following variables present themselves for further research:

- How the normative knowledge foundation, knowledge on the empirical level and scientific knowledge perspectives in the cultural episteme or social structure of African society interrelate, including recognition of the tacit dimension, form an 'African worldview' or indigenous knowledge system.
- How the 'African worldview' is interpreted by the trans-national organisations involved in Africa to reach an understanding of the expectations of Africans concerning freedom, justice, and human rights. Especially the assumption of some trans-national organisations that African knowledge is inferior must be scrutinised.
- The way in which societies and communities in Africa, trans-national business involved in Africa, regional organisations and states, interacting as knowledge-producing entities, form formal and informal interactive chains or networks as part of a 'learning economy', considering all discourses to interpret their environment to form a higher level of understanding and a holistic African knowledge realm.
- How the discourse between African systems and the dynamic global environment is managed, especially how dominant discourses that manifests as unwarranted assertions, demands and control to exert pressure, or to support African society, including involving communities on the periphery of society, are managed.

The holistic perspective allows the scholar engage the study on two levels:

Firstly, on the level of the researcher, Africa must be viewed as an all-inclusive whole system in the global environment order to identify the characteristics of knowledge in Africa and the desired outcomes for the renewal of Africa. The scholar therefore is challenged to determine the manifestation of normative, empirical, analytical, and holistic knowledge on different levels through research. Furthermore, the researcher must be sensitive to issues like dominant discourses, and the use of cultural idiom by the research population.

Secondly, on the level of the decision maker it must be determined how trans-national organisations in Africa maintain a holistic view, considering all discourses, to produce knowledge to ensure complete understanding of the expectations of different cultures concerning justice, human rights, and freedom in the context of the African Renaissance.

Such a holistic system can be illustrated as follows:

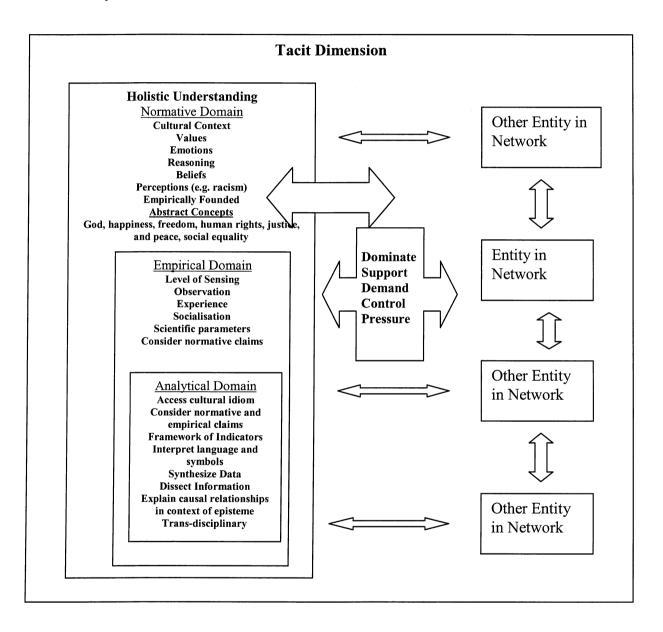


Figure 2.3: A Holistic Knowledge System

CHAPTER 3: KNOWLEDGE MANAGEMENT

'There's a great big river of data out there. Rather than building dams to try to bottle it all up into discrete little entities, we just give people canoes and compasses.' - Molhatra

3.1 INTRODUCTION

In Chapter 2, it was found that knowledge claims could be divided into synthetic-normative, synthetic-empirical, and analytical domains. The importance of a holistic view of knowledge as a concept was identified.

The purpose of Chapter 3 is to deal with the generic foundations of the management of knowledge, with the emphasis on theories addressing holistic knowledge. Findings of this chapter will contribute to a conceptual scheme for empirical research, especially in establishing the gap between theoretical prescriptions and the requirements for a new KM model for Africa.

The discussion will deal with literature on the theoretical concept of KM, theories on the best practices of KM and KM in the new global order, continuously determining imperatives for the management of knowledge in Africa and indicators for field research on KM practices in Africa.

3.2 THE CONCEPT KNOWLEDGE MANAGEMENT

What is KM? Scholars and KM experts could not yet formulate a single description of KM. According to Microsoft, KM is primarily a management discipline that treats intellectual capital as a management asset. Organisational dynamics, process engineering and technology work in concert to streamline and enhance the capture and flow of an organisation's data, information and knowledge, to deliver it to groups and individuals to accomplish specific tasks. (Microsoft Corporation 1999).

An important work, taking KM into the business world, was the one by Harvard Business School. Under the driving force of Professor Peter Drucker the notion of levering knowledge as a resource was placed at the forefront in the academic world and the world of business

management. Drucker created the concept of 'a knowledge based organisation', an organisation that is inter-dependent concerning information that can be used to reach objectives through knowledge-based actions. (Drucker 1998, 1).

The question of action as an ultimate purpose of KM is taken further by Sveiby, another internationally recognised expert, who affirms that KM is concerned with how the organisation can be nurtured and leveraged and can motivate people to improve and share their capacity to act. It is a strategic approach to manage knowledge resources, particularly knowledge workers (Sveiby 2005).

According to Ron Young, a South African KM expert (Stadtler 1999, 20) the spirit of KM is:

'Knowing individually what we know collectively and applying it;

Knowing collectively what we know individually and making it usable;

Knowing what we do not know and learning it.'

According to Kfir (2005) of the Counsel for Scientific and Industrial Research (CSIR) in South Africa, KM is about access to information and knowledge, assisting managers to make informed choices. This is done through training, mentoring and information dissemination and is backed by appropriate technology, learner programmes, databases, documented best practices and modules, action research and policy recommendations. Theunissen (1999) is more specific and calls knowledge 'intelligence', if it is tailor-made for a specific recipient in order to make defendable decisions on policy.

Literature shows that KM, such as all management practices, is about resources. What makes KM distinctive from other management approaches is that it is about what people know and how they interact to innovate. Moreover, it is to manage what people know in a planned, organized, guided and controlled fashion according to practices established specifically for that purpose. Technology is added to generic management practices as an enabler to transform people's knowledge into a manageable resource and to transport that resource to make it useful for the performance of a service or for production. In other words, it is about handling intellectual capital to meet the expectation of society or the organisation.

KM is also about interaction among people, the sharing of information, and creation of objective-orientated knowledge that activates people. In other words it is also about managing social capital towards a desirable action. KM is a culture of learning; not only by the individual, but the growth of knowledge in society and the organisation through interaction and active management. Therefore KM involves strategies and processes to create, identify, capture and leverage vital skills, knowledge and information to enable people to fulfil a vision. It also implies that KM is an art and science of managing the knowledge needs of the community or organisation, presenting learner programmes to meet those needs and making what is needed useful in order to fulfil the specific task on hand. KM is a process of enhancing individual knowledge with the aim of enhancing collective knowledge, using personal interaction or technology to support decision-making and to initiate action. It is therefore not any knowledge that is to be managed, but it is important to identify what is needed for decisions and actions, and then to manage what is needed. This implies that KM is the foundation of innovative decisions and actions to ensure competitiveness and self-emancipation of both society and business.

Without attempting a conclusion it is safe to say that KM is the art and science of managing a process, to transform and enhance what people know (intellectual capital), individually and collectively (social capital), into a tangible knowledge resource needed for defendable decisions and actions.

3.3 KM PRACTICES

Against this background it is imperative to discuss how knowledge is managed and what principles and practices are used to manage what people know. The concepts of strategic management, organised learning, value-driven leadership, knowledge technology and knowledge protection will be discussed.

3.3.1 STRATEGIC MANAGEMENT

Sveiby (2005) identifies the long-term goals of KM:

- Decision can be made closer to the point of action
- Internal and external barriers are overcome
- More opportunities to innovate are created

- Product development time is decreased
- Customer relationships are enhanced.

To achieve that, a strategy must be reinvented to deal with fast-growing markets competing for scarce talent against larger market players. Communication between companies must be facilitated so that the collective knowledge and understanding of the entire organisation could be brought to bear on the problem. The resulting acceleration of knowledge transfer would lead to the leveraging of internal knowledge as opposed to external knowledge, which is a strategic advantage. Value must also be created from diversity in the organisation.

Boisot (1996) discusses 'Information Space Theory' and says that managers are happy with economic theory that helps them to understand and manage the production of tangible objects such as cars, cornflakes and washing machines. There is no satisfactory theory to manage the production of intangibles such as knowledge and information, which is vital to the effective operation of modern society. However, they do not behave such as physical objects and are therefore not subject to the same laws of production and exchange. People tend to treat knowledge and information as if it does not matter and it can be left out of the economic equation. This was perhaps reasonable in the days when calculations were carried out by slide rule and when communications were limited to the slow speed of the telegraph.

Nonaka (1998, 116) found that KM requires a clear leadership from top management who must be able to perform strategic thinking in extremely short cycles to retain a competitive advantage. Companies that isolate KM risk losing its benefits. Management needs to set a vision on how an organisation will use KM to bring value to the organisation, to customers and to other communities. Guidelines on how knowledge assets should be tracked, the business value of assets and progress towards a knowledge-sharing culture, should be provided. An effective strategic KM plan fosters business data, information and knowledge to create new knowledge. Planning focuses on the process, organisational dynamics and technology.

The organisation must have a multi-year knowledge plan to define how it will develop its knowledge resources, either by training or through knowledge agents, or by developing knowledge-based systems to support human agents. Planning for KM means setting goals,

objectives and priorities in producing, maintaining and enhancing knowledge, making forecasts about impacts, making decisions and re-engineering the process. (Firestone 2001).

A company's competitive strategy is driven by a KM strategy. KM should not be isolated in a functional department such as human resources or information technology, but general managers should choose it as a primary strategy. KM should be coordinated with human resources and IT, requiring the leadership of a general manager who chose a clear KM approach. If this does not happen people will become confused about priorities and issues will soon become politicised in a battle for resources. (Hansen, Nohria, Tierney 2000, 16).

3.3.2 THE MOLHATRA MODEL

According to Molhatra (2005, 5-16) current interpretations of KM are often based upon an outdated model of business strategy and may have adverse implications for information and e-business strategy. A case is made for re-analyzing key assumptions based upon a new perspective of KM in the 'new world' of e-business. There are some fundamental shifts that may be characterized as 'paradigm shifts' associated with the transformation from the old world of business to the new world of e-business. These transitions are labeled as 'paradigm shifts' as they represent changes and implications for rendering the 'tried and tested' management theories questionable. These shifts are in terms of how managers think about business strategy, information technology, the role of senior management, organisational knowledge processes, corporate assets and organisational design as shown in Figure 4.1. Each interrelated issue has some implication for one or more of the other issues.

The new world of business brought the need for variety and complexity of interpretations of information outputs generated by computer systems. Variety is necessary for deciphering the multiple worldviews of the uncertain and unpredictable future. Instead of long-term prediction, the emphasis is on understanding the multiple future worldviews by using techniques such as scenario planning.

	Industrial Business	E-Business
Strategy	Prediction	'Anticipation of Surprise'
Technology	Convergence	Divergence
Management	Compliance	Self Control
Knowledge	Utilisation	Creation and Renewal
Assets	Tangibles	Intangibles
Organisations	Structure	Edge of Chaos

Figure 3.1: Transitions to the World of E-Business

The Molhatra model of KM involves organisational planning activities. The organisation plans for its future but does not rely on its plans. Close attention and response to market needs are key determinants. This paradigm shift requires a faster cycle of knowledge-creation and application, by enabling continuous and rapid detection and correction of any discrepancies between the business practices and the dynamic business environment. Access to an organisational information base, authorization to take decisive action, and the requisite skills are situated where the action takes place. Strategy is devised and implemented in real time.

According to Molhatra, through increasing computerization in organizations, practices originally embedded in standard operating procedures and policies become entrenched in the organisational dominant logic in the form of 'best practices'. Formalized information systems tend to be inflexible and are often based upon the belief of the designer that they have already identified the organisational and environmental variables. However, with dynamic and non-linear changes in the business environment, assumptions embedded in such systems become exposed. Realization of such vulnerabilities is behind designing information systems that can take dynamic and diverse interpretations of changing information into account.

Molhatra asserts that the shift is from the traditional emphasis on transaction processing, integrated logistics, and work flows to systems that support communication building, people networks, and on-the-job learning. New, flexible technologies and systems that support and enable communities of practice, informal and semi-informal networks of internal employees

and external individuals based on shared concerns and interests are needed. Developing virtual communities of consumers and users is among key priorities of vertical portals and specialized industry portals.

According to Molhatra many of the new age scholars and practitioners are rejecting the 'way things have always been done' and assess practices from multiple perspectives. The bias of command and control systems for seeking compliance makes such systems inadequate for divergence-oriented interpretations that are necessary for ill-structured and complex environments. KM systems designed to ensure compliance might ensure obedience to given rules, but they do not facilitate detection and correction of errors. The role of the senior management needs to change from command and control to sense and response. Furthermore, knowledge is about beliefs and commitment and the new emphasis should be on building commitment to organisational vision rather than compliance to rules and best practices.

In the model of Molhatra, senior managers view the organisation as a human community capable of providing diverse meanings to information outputs generated by the technological systems. The organisational information base is also accessible to members of the organisation. The increasingly dynamic business environment tends to create a division between decision-making at the top and implementation of such decisions at grassroots level. Multiple and diverse interpretations of information help in the development of more responses needed for understanding the complexity of a dynamic business environment.

Molhatra continues to say that 'best practices' embedded in IT facilitate efficient handling of routine and predictable situations. However, proactive involvement of human imagination and creativity is needed to facilitate internal diversity to match the complexity of the 'wicked environment'. Effective KM in such environment may need imaginative suggestions more than it does concrete, documented answers. The earlier emphasis of information systems was on defining the optimal programmed logic and then executing that logic to ensure the highest efficiency. However, increasing dynamics of the business environment require greater emphasis on doing the right thing than on doing the thing right. With the reassessment of key assumptions, the emphasis is more on continuous renewal of existing knowledge, creation of new knowledge and its application in business practices. This contrasts with the 'old world' model of archiving the knowledge in organisational databases devoid of human reinterpretation of its context and content.

The 'Molhatra-model' assumes a problem as given and the solution as based upon the prespecified understanding of the business environment. The model proposed by Molhatra defines the problem from the knowledge available at a certain point in time and context. Individual autonomy in the proposed model facilitates the divergence of individual personal perspectives; the organisational vision facilitates the various views to converge. This process avoids premature closure or convergence to face multiple possibilities, opportunities and threats that could lie in an unknown future.

Molhatra propose that KM is expected to break this cycle of reinforcement of institutionalized knowledge. The traditional business logic is based on a high level of structure and control. The dynamics of the new business environment demands a different model of organisation design. Characterized as 'living on the edge of chaos', this model is marked by relative lack of structure and lack of external controls. This model assumes few rules, some specific information and a lot of freedom. The designers of organisational KM systems can facilitate 'self-designing' by the organisation. The members of the organisation define problems for themselves and generate their own solutions. The members would also evaluate and revise their solution-generating processes. By explicitly encouraging experimentation and rethinking of premises, it promotes creation of new knowledge. It is increasingly being realized that differences in perspectives may have a very positive role in innovation that feeds new product and service definitions and business models.

Molhatra concludes by saying that the model encourages questioning of all given assumptions, regardless of their legitimization, for their continued reassessment. Instead of emphasizing 'best practices' archived in databases, this model encourages continuous pursuit of better practices aligned with a dynamically changing business environment. (Molhatra 2000, 5-16).

3.3.3 PRODUCTION OF TANGIBLE KNOWLEDGE

Les Alberthal (1995) puts knowledge production into KM context when he remarks:

'Such as water, this rising tide of data can be viewed as an abundant, vital and necessary resource. With enough preparation, we should be able to tap into that reservoir and ride the wave-by utilizing new ways to channel raw data into meaningful

information. That information, in turn, can then become the knowledge that leads to wisdom'

According to van der Linde (1996, 275-269) the key concept 'knowledge production' refers to a group of interlinked processes related to research collaboration, individual research, the dissemination and evaluation of research results and the integration of selected results into further research, which restarts the cycle. This proposition implies that knowledge production is not only a linear continuum, but is cyclic in nature. The creation of knowledge is a never-ending process of value-added outputs from one system becoming inputs into another system, where new value is added from knowledge available in that system, when integrated.

Microsoft Corporation, among others, emphasises the 'knowledge continuum', distinguishing between data, information and knowledge. Business data are described as facts about events in the real world. It can be captured on databases, analysed, synthesised and transformed into information. Information is explicit experiences of which the content is stored in a structured way. The content and structures are managed to be retrieved. Data are seen as the empirically collected raw material, information relates to description and definition, knowledge comprises the understanding, and explanation of strategy, practice, method, patterns or approach and wisdom explains but includes principle, insight, morals, beliefs, perspectives and archetype. Data, information, knowledge and wisdom represent an emergent continuum and progress is takes place along the continuum as understanding develops. (Bellinger 1999).

Nonaka (1998, 21) discussed the 'knowledge creating company' and proposed that Western managers hold a too narrow view of what knowledge is and what companies must do to exploit knowledge as a resource: A company is 'a machine', processing information. The creation of new knowledge depends on tapping the subjective insights, intuitions and ideals of workers. He uses the example of 'holistic knowledge creation' as a tool for innovation in Japanese society.

According to Nonaka knowledge production is about making tacit knowledge explicit. Intangible knowledge assets are described as tacit knowledge, and include all the intellectual capital of the organisation, which is the collective education, skills, experience, energy and

attitudes that influence customers and products. It is owned by the individual and is renewable. Explicit knowledge is tangible and is in written or recorded format. It includes books, manuals, magazine libraries, policies and procedures, which can be identified, articulated, captured, shared or applied. It may also include large databases that can be exploited through data mining to reveal trends and patterns in support of business processes. It is formalised, captured and leveraged to produce a higher value asset.

The future belongs to companies that can take the best of the East and the West and start building a universal model to create new knowledge within their organisations (Nonaka & Takeuchi 1995, 224-245). In this model, nationalities are of no relevance. Success will be judged based on knowledge-creating capabilities. To become knowledge creation organisations managers need to build and manage multiple conversions, spirals and synthesis. The key lies in multiple transformations across multiple-dimensions, called hypertransformations, which involve a dynamic, interactive, and simultaneous process. According to the model, the essence of knowledge creation is in building and managing synthesis. Seven dichotomies were identified, which are to be synthesised.

The 'tacit/explicit dichotomy' involves the interaction of tacit and explicit knowledge to create new knowledge. Knowledge conversion takes place through socialisation, externalisation, internalisation (learning) and combination (information processing). Externalisation is the most important, involving personal knowledge being converted into knowledge that is transmittable in words or numbers, but also by using metaphors or analogy.

The 'body/mind dichotomy' is seen as the most powerful way of learning involving emphasis on the importance of bodily experience. One gains subjective insights, intuitions and hunches from bodily experience. It is equally as valuable as intellectual abstraction. The philosophy of 'the oneness of body and mind' makes it easier to build a synthesis.

The 'individual/organisational dichotomy' involves the dynamic interaction that facilitates the transformation of personal knowledge into organisational knowledge. The individual is the creator of the knowledge and the organisation is the amplifier of the knowledge. The group, or self-organising team, functions as the synthesiser of knowledge through dialogue and discussion, creating new knowledge.

The 'top-down/bottom up dichotomy' involves the creation of knowledge by middle managers, or leaders of a team or task force. The process involves a spiral interaction between top and front-line employees with the middle manager placed in the centre of synthesis building.

The 'bureaucracy/task force dichotomy' involves a synthesis of the efficiency and stability of the bureaucracy combined with the effectiveness and dynamism of the task force within a 'hypertext' organisation. A third organisational layer, the knowledge base, is added to categorise and conceptualise according to the corporate vision, organisational culture and technology of the firm.

The 'relay/rugby dichotomy' involves the trade-off between performance gained from the sequential approach of product development and the speed achieved by multi-disciplinary teams whose members work together from start to finish. Project leaders, at the beginning of the process, make decisions through dialogue. Several groups then carry out concurrent activities under clear division of labour. Each team then operates as a unit from start to finish. Project leaders then coordinate inter-departmental actions.

The 'east/west dichotomy' involves the realization that differences do exist. Westerners tend to emphasise explicit knowledge, Japanese tend to stress tacit knowledge. Westerners are more focussed on individuals, while Japanese are more group-orientated. Western companies should pay attention to the less formal and systematic side of knowledge and begin focussing on insights, intuition and hunches gained through experience or on the use of metaphors and pictures. On the other hand, Japanese companies should make better use of advanced information technology to accumulate, store and disseminate explicit knowledge. Western companies need to learn to amplify knowledge through dialogue, discussion, experience sharing and observation.

3.3.4 THE CREATION OF TACIT KNOWLEDGE

Garvin (1998) was one of the first proponents who introduced the concept of the 'learning organisation' by saying that before people and companies can improve, they must first learn. People must be skilled at systematic problem solving, experimentation with new approaches, learning from experience and best practices, accompanied by quick and efficient transfer of

knowledge through the whole organisation. Pelissier (2001) found that if the organisation is knowledge-based, it means that knowledge and business intelligence are competitive weapons. The globalisation of organisations reveals that businesses are competing in a borderless environment. Therefore, business requires learning support and the ability to share information, knowledge, and wisdom in order to leverage intellectual capital.

According to Hayes (2005) organisational wisdom is an aim to strive for. Wisdom is the ability to foster learning, understanding, commitment and 'doing the right thing'. Wisdom is greater than knowledge, intelligence and experience, enabled mostly by an increased awareness of and commitment to higher ideals, service and appreciation of consequences of actions taken.

Wisdom is similar to tacit knowledge and takes the form of beliefs and perspectives. It is in the mind of people and not proprietary to the business. Wisdom is mostly shared verbally and is not always in written format, and therefore difficult to capture or extract, a mixture of facts and perceptions sometimes culturally based. (Havens & Knopp 1999, 6). Collective wisdom is the 'sixth sense' or instinct that informs decisions and implicitly shapes strategic directions. (Koulopoulos, Spinello & Toms 1997, 61).

Argyris (1998, 82) proposes that organisations must teach managers and employees to break down defences that block organisational learning. Leonard and Strauss (1998, 110) point out that different people have different thinking styles, e.g. analytical versus intuitive, conceptual or experiential, social or independent, logical or values driven.

Therefore, ground rules have to be set for people working together. A programme must be developed to carry out a learning and knowledge sharing culture with a reward system that recognises knowledge accumulation. Those responsible must create an organisational culture which is found challenging by smart people. (Duffy 1999)

Boundaries will have to be broken down, including de-layering the organisation, crossfunctional teams, and the creation of alliances. Best practices to be implemented include mapping, creating mechanisms for knowledge sharing, establishing the infrastructure for the cataloguing, maintenance and distribution of both tacit and explicit knowledge, e.g. data warehouses and search engines, as well as creating an organisation of sustained learning. (Delphi 1991, 49-55).

Trompenaars, (1995, 885) proposes that the international manager strives toward 'riding the waves' of intercultural differences. The circumstances of business and organizing experience require leaders to reconcile dilemmas. An organisation can only prosper if as many particulars as possible are covered by rules, with exceptions seen and noted. A person can only think effectively if both the specifics and the segments and integrations are covered. Whether the culture is individualist or collectivist, people must be able to organize themselves. Collectives are only as good as the health, wealth and wisdom of each member. Furthermore, we need to accept influences from both our inner convictions and the world around us. Culture is the manner in which dilemmas are reconciled and businesses will succeed according to the extent by which reconciliation occurs.

Thought leadership is taking another path as everybody is looking at things in a new way. There are many ideas that can be transferred from one industry to the next. People from different disciplines can be creative in new areas. Thought leadership gets clever people to think in new ways and apply knowledge they have gained through time and across industries to apply it to new problems. Innovative thinking among employees must be promoted; they must be guided not to rely on what they know and to remember that there is always a different, better way than the one adopted. Everybody should be challenged repeatedly in a merit-based organisation with lots of collaboration and peer pressure to do it better. People with that inclination become part of a team and given the opportunity to be creative. (Cymerman 2005).

Kleiner & Roth (1998, 47) reminded us of the ancient practice of community storytelling as method of transferring knowledge. Narratives of recent events by participants or observers, scrutinised by outsiders, can be valuable for disseminating knowledge.

During the Fifth Annual International Conference on Knowledge, Culture and Change in Organisations (2005), it was found that there is a movement away from controlling and making knowledge tangible to emphasis on cross-cultural sharing of tacit knowledge through word-of-mouth. Diversifying the work force to create a social framework where knowledge

can be created and transferred among cultures and disciplines, encouraging collaborative relationships and cultural sensitivity, increasingly become best practices.

3.3.5 USE OF TECHNOLOGY

Drucker maintained that development in information technology demands changes in the work environment. Computers communicate quicker than layers of managers. All that is needed is a knowledgeable user of computers to transform data into valuable information. (Drucker 1998, 1). With this classic assertion Drucker sensitised the KM discipline to keep in mind that ICT not only enables organisations to render knowledge tangible by turning data into information, but also to disseminate and share information and knowledge quickly within the organisation and over a long distance in a short period of time.

The Department of Computer Science, University of Cape Town, agrees that KM is an evolving field that attempts to maximise and sustain the competitive advantage of a company through leveraging its knowledge resources. KM practises are often built on a foundation of knowledge transfer and knowledge sharing. Recently there has been an increase on the reliance of automated tools to perform these functions. Typical components of these tools include querying large datasets, user profiling, user interfaces and recommending systems. Traditionally, these components have been implemented using different technologies. (Brown, Rouse, Kunene, Potgieter, Berman, & April, 2003).

It was in the context of collaboration that the use of computers as KM tools are emphasised. Electronic collaboration was seen as a process through which partners can contribute by using e-mail, groupware and public networks. Computing was seen as the backbone of knowledge sharing and one of the most significant enablers, connecting communities through hardware and software. It enabled access through data repositories, browsers, and search technology. The feedback of lessons learned, for the purpose of continuous improvement and to creating a community for the sparking of ideas and innovation, is a key concept. Knowledge sharing must take place through enabling information technology. According to Professor Duffy (1999) from Wits University it does not matter if an organisation enters the world of KM through existing technology or through a deliberate culture change, as long as it is aligned to the strategic goals and direction to add value to the organisation.

Scholars suggest that a supportive, collaborative culture, eliminating traditional rivalries, must be created. A powerful, synergistic relationship between KM and technology must be promoted. (Grayson & O'Dell 1999). Practitioners and theorists agree that KM means attention to the culture of people and organisational structure, as well as information technology as an essential tool for knowledge sharing. (Havens & Knopp 1999, 6). What is essential here is the clear distinction between the concept of KM and the concept information technology. The notion of some practitioners that the use these two concepts as synonyms, is clearly rejected.

If placed in the context of a state structure it implies that countries must be ready to connect with each other in different ways, including electronically. "E-readiness" implies the capacity of a country to participate in a networked world. Readiness is measured by the efficiency and effectiveness of the participants as well as whether e-governance and knowledge production efforts are endorsed and seen as legitimate by the leadership of a country or community. Five attributes (connectivity; E-leadership; information security; education; and the E-climate) are needed for successful e-governance. (Docktor 2004).

Davenport, (2006) is of the opinion that the organisation should establish a group that is responsible for collecting, categorizing and capturing data to establish a knowledgebase, using technology infrastructures. Tasks of the group will include the mapping of organisational knowledge in order to improve access, involving the packaging and application of knowledge by specialised knowledge workers. Firestone (2001) agrees that this group can facilitate sub-processes, which may include the provision of IT support, and the creation/maintenance/modification of the knowledge base, communicating the knowledge base to knowledge consumers and managers, as well as the education, training and sensitising of personnel to use the knowledge base.

According to McGovern, the information industry is often more focussed on technology than information. It is driven by a mechanistic view of things. Information is such as a bag of potatoes that had to be stored somewhere with the objective of saving space. On the contrary, knowledge is embedded in people, and knowledge creation occurs in the process of social interaction. Only human being can take the central role in knowledge creation. Computers are merely tools. (Sveiby, 1997).

According to the 1999 human development report, global technology must encompass diverse needs and cultures. Systems must be developed for poor people and countries. Precaution is needed in exploring new applications, irrespective of the commercial promise. Only then will globalization allow technology to be steered to the needs of people, not just profits. (Human Development Report, 1999).

The Fifth Annual International Conference on Knowledge, Culture and Change in Organisations (2005) concluded that it is necessary for a communication strategy to incorporate remote areas (local, regional and international) through enabling ICT systems to link communities of practice and cross-functional groups. The communities of practice paradigm is one of the latest trends in KM theory.

Nabudere (2006b) asserts that education and life-long learning, using ICT, can be used to improve the situation of pastoral communities. With education, these communities can engage in activities that can result in the social transformation of their lives. The current age is characterised by ICT, which is exploited to the full by capitalist expansion. Instead of improving the lives of people, the deployment of technologies by corporations has resulted in marginalisation and social exclusion of poor communities. Those with financial and military power have used technology for military purposes. The activities of multi-national corporations are not only an expression of business necessity, but reflect the economic interests of dominant social forces, which use the state to enforce and dictate their interest. Instead, technology can be used by the marginalised and excluded communities to increase their knowledge and engage in self-empowerment and self-transformation in the struggle for democracy and control over own natural resources.

3.3.6 PROTECTION

McGovern reiterates that many organisations still believe in being secretive, giving away as little information as possible. However, even if it is necessary, it is becoming an increasingly difficult task. In the past information had to go through a rigorous process before it could be released. He suggests that today the same process should be followed before it is kept confidential. Competitive advantage should be in the momentum information creates, rather than the information itself. (McGovern 1999).

Mshana (2002, 208) asserts that for the first time in history the richest person in the world is the knowledge worker. Knowledge is power. Therefore, the AU is calling for equity in sharing knowledge and investigation of the increasing privatisation of knowledge. Interest and involvement in the generation of knowledge by the community brought focus on ownership and exchange of knowledge. Nations without a secure knowledge base will not enjoy national security and will suffer frequent destabilisation.

Maskelkar (2002, 188-198) proposes that the developing world should create a Traditional Knowledge Digital Library (TDKL) with a web-based search interface providing full-text search and retrieval of traditional knowledge with secured access. The crucial role of IT and intellectual property in driving the economics of knowledge is asserted. The key players will be international development agencies, the government and the innovators.

During a lecture in May 2007 Mashelkar explained how indigenous knowledge could be protected while exploring it within a national science system to use IKS for development. The strategy starts with identifying the holders of the indigenous knowledge. He places the emphasis on human dynamics to develop mutual trust and to stress the value of intermediaries. Leadership with experience of indigenous society provides the leading edge and act as champions to talk to the holders of indigenous knowledge, explaining the consequences of protection and sharing. People develop a respect for IKS through education and when they start benefiting from sharing knowledge and a culture of well-being is being created. The intermediaries should be messengers explaining the greater good versus the risk of exploitation.

3.3.7 EVALUATION

The knowledge continuum implies a process of value adding during which knowledge claims from all domains are included to form new knowledge. Firstly, there is the raw data obtained from observation of the environment, in other words, empirical data. Secondly, it provides for the inclusion of normative data (values, axioms, personal insights, beliefs, archetype, and norms). Thirdly, it provides for the inclusion of more formal analytical knowledge (the result of capturing, storage, retrieval, synthesis and analysis of information). The continued process therefore ensures a holistic approach to the production of new knowledge.

In practice, it means that society and organisations need intellectual capital, supported by systems to create information, experts to analyse this information and participation in a convergent middle ground where joint decisions are made. If this high quality of knowledge is shared by communities and organisations with the dynamic trans-dimensional environment they are part of, a universal knowledge foundation is possible.

Recent literature points the knowledge manager away from focusing on making knowledge a tangible asset to a focus on knowledge creation through verbal interaction. Therefore, facilitating intense verbal interaction among knowledgeable people to create a learning organisation is a task of the knowledge manager. However, a distinction must be made between making what people know tangible so that it can be used for decisions and actions, and the creation of a learning organisation, which is essentially a best practice to enhance what people know. In the recent theory of KM a new movement away from making knowledge tangible emerges. A culture of learning is needed in society and the organisation, involving the expansion of intellectual capital through learning, which involves not only the enhancement of personal knowledge but also the transfer of knowledge between individuals with the purpose to learn. A culture of learning can emerge through the implementation of formal best practices or through spontaneous and informal interaction, while the production of tangible knowledge for decision-making is always a formalised process.

The question of creating information from data, analysing the knowledge and using it for decisions is well covered by theorists. It is the activities of interpretation of knowledge that leave a challenge, because these are part of the process which is left entirely to the judgement of the individual leader or manager to decide what knowledge is to be used for complex decisions and actions.

The application of wisdom requires the involvement of 'higher minds' in the interpretation of knowledge in order to ensure wise decisions and effective action. This means that the tacit instinct of people who have a trans-dimensional vision of the consequences of decisions and actions on a vision in a specific cultural milieu is the essence of knowledge production. If this tacit instinct can be converged involving wise people from different backgrounds, but with the same desire to serve humankind, wise decisions and effective action are possible.

Scholars indicate the holistic nature of wisdom, which is normative in the sense that it contains a strong element of cultural values and commitment to a 'higher cause' and the desired end state of the organisation. Furthermore wisdom is based on awareness and understanding of reality, a result of life-long learning.

From theoretical assertions it can be inferred that the planning process with regard to KM is in generic terms not different from any other planning in the discipline of strategic or business management. Therefore the community and organisation must have a clear strategic framework for KM articulating organisational values, a clear vision where managers, facilitators and leaders must go with KM, as well as specific goals and policy guidelines addressing specific issues.

Competitive advantage through KM can be achieved by means of a clear knowledge strategy, policy frameworks and effective communication among internal entities and with the external environment to enable innovative decisions to overcome challenges in a quest to satisfy both customers and the expectations of the cultural context.

Literature shows that to use any resource effectively, knowledge is needed and that the management of knowledge in all disciplines such as finance, logistics, human resources and operations requires leadership and knowledgeable people to manage knowledge in a holistic fashion as an asset to society and the organisation. Knowledge is therefore not a separate resource, but encompasses every activity of the organisation. Within the context of KM for conflict resolution in Africa, for instance, KM should not be seen as a separate initiative, but as part of all activities, requiring a holistic approach according to the best practices of general management to prevent, resolve or manage conflict.

In the case of KM as a resource, the focus is on how knowledge as an asset is produced and integrated in a planned way in conjunction with other assets such as human resources, infrastructure, information, ICT and funds to achieve specific short-term objectives, to reach intermediate goals and to fulfil the mission of the organisation, as well as community expectations.

Literature on the knowledge organisation reminds one that the generic principles of organisation seldom change. What changes is the cultural context. Dilemmas caused by

cultural differences need to be managed through strategic frameworks and dynamic leadership reconciling differences to find common middle ground among individual and collective worldviews in an organised way.

This 'culture of learning' is fundamental to a knowledge organisation. Although not a new concept, a renewed awareness of intellectual capital as an asset, results in the current focus on learning to enhance productivity and to emancipate people. New knowledge must be created and value added through human interaction inside the organisation.

These propositions suggest the adjustment of practices in the community or organisation in order to enhance learning, which is imperative to participate in a globalised world and to compete if necessary. It furthermore implies the institution of specific best practices such as cross-functional task teams working across boundaries set by formal organisational structures, creating networking alliances outside the community and organisation with the specific purpose to learn. It also requires the development of knowledge sharing practices (both formal and informal) in the community or organisation and with other entities.

The importance of trust is emphasised. For the researcher it implies that the networking among people in the organisation or community must be evaluated in terms of how new knowledge is created through networking and the overcoming of obstacles to successful networking, including the building of trust.

Leveraging of diversity is a major challenge for any organisation and heterogeneous society in order to ensure maximum learning. The manager therefore has to deal with removing obstacles such as distrust among people from diverse backgrounds, language differences, an unfriendly or hostile environment, and different personalities. It is in facing these challenges that the role of leadership becomes prominent when best practices for KM are analysed. To create a knowledge driven organisation the leader is required to be a strong motivator, communicator and facilitator for people to apply their minds to innovation and the transfer of knowledge between disciplines. This requires not only a specific attitude from the individual but also careful guidance of people towards a specific way of thinking.

Trans-disciplinary thinking and the management thereof towards the vision, strategic intent and goals of the society and organisations lie at the roots of management and leadership.

These propositions suggest a very radical change in approach to management and leadership. Knowledge became dominant as a resource in a world where knowledge can be made visible and communicated more easily as a tangible asset, which can be renewed through learning, and if not managed, denies the business the value thereof for production and services.

Evaluation of the Molhatra model shows a recurrent concept of divergent interpretations of information and emphasizes reliance on human imagination and creativity to detect and interpret discrepancies in information. Furthermore, it allows for definition of the problem in context, different scenarios based on different interpretations and final convergence to determine real opportunities and threats.

Interactive communication is addressed with reference to people networks and virtual communities of users to share and transfer knowledge about a dynamic environment, including data on changes and multiple and divergent worldviews. Cultural diversity is recognized in the sense that different worldviews are accommodated, both as an issue to respond to and in the production of new knowledge.

The power relation between the organisation and external communities is one of response, which does not exclude interactive response to the communities involved. The role of leadership is amply included with the emphasis on leadership vision to allow for flexibility in processing information and convergence as an ultimate outcome of the knowledge product.

The significance of sense and response in comparison to command and control are valuable concepts that call for further investigation. The model is critical of information technology because of the lack of flexibility offered by traditional computerized systems and is seen as of most value in predictable situations or if ICT support can be rendered in a flexible way to enable the renewal and creation of knowledge by people.

The necessity of knowledge production and the role of knowledgeable people to achieve that is noted, referring not to only specialist knowledge workers or technology but all people who may contribute to the creation of new knowledge. If the assertion is applied to Africa, it shows the necessity to get all role players involved to create holistic knowledge. To produce knowledge, systems must be in place to make tacit knowledge tangible to be used. What is in the minds of people has to be made visible. The wealth of knowledge available in oral format

in especially traditional societies and people in the organisation needs to be accessed and captured.

If the classic model of Nonaka and Takeuchi is evaluated it is found that it explicitly addresses the requirement for the transfer and synergising of knowledge through interactive communication. Another strong feature of this model is the emphasis on knowledge creation and production in several ways involving trans-disciplinary teams, which have the insight and intuition to understand the symbolism of tacit knowledge embedded in cultural diversity and render it tangible.

The issue of leadership is also highlighted, especially the central role of the manager in synergizing the knowledge inputs from official procedure with the inputs from the operational task force working within the communities. The model mainly prescribes how new knowledge can be created. Because of the theory being grounded in research done on interaction between Western and Japanese organisations, the probability of generalization within other cultural contexts, such as Africa, is high. However, the sensitivity to cultural diversity cautions against the extrapolation of the model to African conditions without indepth filed research in specific conditions.

Technology is a 'KM tool' and society and the organisation relies on technology for the production and sharing of knowledge as an enabler of the process. For the purpose of the study, the question immediately arises if this approach is viable in conditions where technological infrastructure is underdeveloped or does not exist. The E-readiness of societies and communities include aspects such as the levels of technological infrastructure to ensure connectivity, support from authorities to enable information and communications technology, the protection of electronic information and the capacity of states and organisations to use the electronic media to contribute tangible knowledge for development in Africa.

A further important concept identified in literature is that of the professional 'knowledge worker' in interaction with technological infrastructure. It is at the point of information creation where these two resources meet and ensures that the wealth of data, information and knowledge is made tangible in a structured way. Furthermore, it is in this specialised environment that information is retrieved and delivered to the manager for interpretation,

production and dissemination. Moreover, it is in the field of information management where technology proved to be invaluable if the organisation wishes to embark on such a venture.

Theorists and practitioners of KM now realise that the 'stars-in-the eyes' phase of the computer age is over and that more and more people are becoming conscious of the limitations of technology as knowledge of the subject increases. Scholars have found that KM is about people and the minds of people. All other resources used for the management of knowledge, including ICT, are only tools, which enable people to unlock and produce new knowledge.

The use of ICT in a specific cultural environment (Africa) forms part of this study. The scholar investigates the role of technology as enabler in a specific environment and how effective ICT is to improve the sharing of knowledge among African people. Sharing through ICT is compared with the use of other traditional systems and its effectiveness for interaction is questioned. The challenge in the use of technology is highlighted.

It is accepted that the use of computers is by now a basic skill in the work environment. Such as any language it allows access to knowledge that is otherwise denied. However, cognisance must be taken of the fact that many people in the world, including people in Africa, are still denied the opportunity to master this skill or do not have access to the enabling technology. The unfortunate consequence is that many people are denied a broad perspective and also prevented from sharing their knowledge with the technological power houses of the world.

The importance of sharing knowledge over long distances, including with communities on the periphery of state systems and across borders, is emphasised. A concept of significance addressed here is the linking of communities for a specific purpose to share specific knowledge, which still does not address the ideal situation of good knowledge-sharing infrastructure for all people. ICT to alleviate poverty instead of its application thereof for commercial competitiveness and military purposes is an important variable in the African context. The use of ICT to educate, empower and emancipate marginalised communities to participate in democratic practices and maintain control over their own natural resources is an important challenge for not only the nations where exploitation occurs but also a priority responsibility of the trans-national organisation.

In view of the discussion on the theory of the role of technology in KM, the following is found

- KM is mostly about people and to manage what people observe, believe or concluded.
- ICT enables managers to process data into information and information into knowledge and to use it in a planned, organised and controlled way to fulfil a mission.
- ICT enables people to interconnect over long distances beyond borders and makes possible for people to share knowledge, wherever they are located.
- To use ICT on an international level, society and organisations must be Eready, implying that the required infrastructures and training exist, government supports knowledge sharing and that tangible knowledge is available to share.
- The successful use of ICT depends on a workforce capable of using it and specialised knowledge workers to facilitate interaction between workers and technology.
- An important pitfall that must be avoided is obtaining technology that is profit driven and not in the interest of human development.
- Where infrastructure and skills do not exist, people are denied access to modern knowledge and are reliant on traditional knowledge and knowledge imported by other interaction, e.g. religion and indigenous knowledge.
- Where such a situation exists, it will be unwise to rely on ICT only to manage knowledge. It will require the use of more traditional and tested methods, combined with what technology is available.
- The alleviation of poverty and emancipation of marginalised people through ICT driven knowledge systems is a high priority.

The use of internet protocol to move from oral practice to written text to web-based traditional knowledge poses a challenge to many role players, from the traditional community and holders of such knowledge to the experts who must convert oral text to written texts to the technologists who must enable retrieval.

Therefore, the knowledge base of an African knowledge system needs to be protected, especially in view of unequal power distribution in the world and a history of exploitation of African resources. African knowledge has become a valuable resource that needs to be

protected, not only addressing the condition of national security but moreover to ensure that knowledge in Africa is used in the interest of human security in Africa. Communities must benefit from their knowledge base and holistic products without risk of exploitation and denial of compensation.

It has always been part of some cultures to be secretive about things, especially where suspicion and feelings of insecurity are concerned. A strong case can be made out for the principle of need-to-know and limited access where the security of the state and its citizens are at stake. One tends to agree with McGovern that there should be very good reason to handle knowledge as privileged, but in the same vein it must be remembered that the notion of exploitation should be prevented.

Policy frameworks should be in place allowing for the free sharing of knowledge between individuals and institutions, excluding those that would place the community or business in a clear disadvantage or vulnerable position in a partnership, but guiding those participants whose knowledge and actions are vital for learning and production of new knowledge to find solutions in the common interest. Protection of knowledge should include the protection of that knowledge that would be to the advantage of one institution, seeking misplaced competitive advantage over another institution, when the same goals are shared.

Where knowledge is produced, methods of compensation must be developed where mutual benefit of a synthesised knowledge product is not clear. Although a strong case can be made out for the protection of indigenous knowledge, care must be taken that developmental goals, such as NEPAD are not compromised by selfish protection of knowledge, where such knowledge can benefit Africa. Therefore, unambiguous policies and agreement between business and the community about knowledge interaction are essential.

3.4 KM IN THE NEW GLOBAL ORDER

At the root of the new paradigm of KM lies the concepts of a 'knowledge economy' which can either be an economy of knowledge focussing on the economy of the producing and management of knowledge, or a knowledge-based economy, which is the use of knowledge to produce economic benefits. (Drucker, 1969). Knowledge economy differs from the traditional economy in the following ways.

- Unlike most resources that are depleted when used, information and knowledge can be shared and actually grow through application.
- Using appropriate technology and methods, virtual marketplaces and virtual organisations can be created globally.
- Creation of business clusters around centres of knowledge, such as universities
 and research centres enhanced global excellence.
- Knowledge, when made explicit through systems or processes has higher value than if it can 'walk out of the door' in the minds of people.
- Human capital is a key component of value in a knowledge-based organisation
- A knowledge-based economy requires new ideas and approaches from policy makers, managers and knowledge workers.

3.4.1 THE KNOWLEDGE ECONOMY

According to McKern (1995, 832-848) during the final decades of the 20th century international corporations shaped a remarkable transformation of the international economy, creating integrated businesses linking multiple global activities. Trade between nations expanded at a rate faster than the growth of the global economy as a whole. The main participants are international corporations transacting with own affiliates and subsidiaries distributed all over the globe. During the last decade of the century the world experienced a surge of trans-national integration during which foreign investment doubled, coupled with recessionary economies in the developed countries, intensifying competitive pressure. In response organisations focussed on reorganisation and established work methods to find ways to create value for customers by deploying resources more effectively. From manufacturing and product development the competitive arena shifted to alternative businesses and the structure and culture of the firm.

Dunning (1997) asserts that the boundaries of organisations in a market-based capitalist economy are moving from hierarchical to alliance in character. Boundaries of organisations are becoming more porous and organisations become more interdependent and complementary. International business activity needs to modify its paradigms and theories to encompass the implications of alliance capitalism.

By 1999 the need for knowledge driven economies was recognized all over the world. Finland has a knowledge driven economy where 80% of workers are knowledge workers. In the USA it could be as much as 70%. Singapore created an intelligent island with knowledge as the key strategic component. The real success of KM lies in organisations and nations that move from individual knowledge to collaboration. (Stadler 1999, 22).

These demands of the post-industrial economy with its fast changing and competitive environment compelled organisations to manage and use information and knowledge intelligently. Today knowledge is regarded as a form of capital as part of what is now known as the 'knowledge economy'. Therefore organisations need to share and manage knowledge as a resource to survive (Cronjé et al 2004, 586).

Subsequently, according to Clarke and Steward (2000, 431) all business is becoming knowledge-based. The utilization of updated knowledge is now a critical ingredient for commercial viability. It has become necessary not only to put better knowledge systems in place but also to create collaborative structures, group technologies, supportive infrastructure and measurement systems to facilitate acquisition and deployment of new knowledge. In knowledge-based business, learning and innovation have become the critical drivers of business development. The workplace has become a central mechanism for knowledge-exchange and utilisation rendering the organisation more alert and responsive. Knowledge centres have been created to offer best practices to customers.

Two aspects in the new knowledge economy were identified that influence the way KM is conducted. The first is the presence of multi-national corporations. The second is the increasing demand for corporate responsibility.

Multi-national Corporations (MNCs) either owns or controls foreign subsidiaries in more than one country. It is this ownership or control of productive assets in other countries that makes the MNC distinct from an enterprise that does business overseas by simply exporting goods or services. MNCs cover the entire spectrum of business activity, from manufacturing to extraction, agricultural production, chemicals, processing, service provision and finance. There is no 'typical' line of activity of a multinational. Some MNCs are truly 'global', with production located in a wide variety of countries and regions. Other MNCs, by contrast, only locate in one other region, or in a very narrow range of countries. (Suneja 2000, 196-197).

Ratner (2001, 237-250) asserts that, if a business materially contributes to a violation of human rights by the government with knowledge, knowing of that activity, it should be held responsible as a matter of international law. A business has a duty not to form such complicit relationships with governments. The international legal standards for complicity would require a corporation not to lend its equipment to government forces if it is known that it will be used to suppress human rights. Recognition of such duties would address many, perhaps most, of the concerns about corporate involvement in human rights abuses, for example, accusations of corporate involvement in harassment of critics of government and loans of corporate equipment to military units suspected of human rights abuses. However, it would not require a corporation to divest or not to invest in the first place, in a country whose government abuses its citizens. From a moral starting point, the corporation has a duty not to invest at all in a repressive society, or a duty to ensure that it does not in any way benefit from the government's lax human rights policy.

Ratner reminds us that the law on individual responsibility has long recognised notions of complicity as well, for example, Article III of the Genocide Convention 1948 states that conspiracy to commit genocide and complicity in genocide also constitute crimes. The statutes of the International Criminal Tribunals for the Former Yugoslavia⁵ and for Rwanda⁶ make culpable those who 'planned, instigated, ordered, committed or otherwise aided and abetted in the planning, preparation or execution" of one of the enumerated crimes. The Rome Statute of the International Criminal Court, A/Conf. 183/9, 17 July 1998, entered into force on 1 July 2002 offers a detailed schema, providing for responsibility for a broad range of associated crimes, but making being guilty of these crimes conditional on the completion of various acts or possession of various mental states. Both the state (civil) and individual (criminal) standards clearly recognise such responsibility as long as the underlying activity is illegal and the state or individual involved in the illegal activity has knowledge of it.

⁵ The Statute of the International Criminal Tribunal for the prosecution of Persons Responsible for Serious Violations of International Humanitarian Law Committed in the Territory of Yugoslavia since 19991, SC Res. 827 0f 25 May 1993

⁶ The Statute of the International Criminal Tribunal for the prosecution of Persons Responsible for Serious Violations of International Humanitarian Law Committed in the Territory of Rwanda and Rwanda citizens responsible for Genocide and other such violations committed in the territory of neighbouring states between 1 January 1994 and 31 December 1994, SC Res. 955 of 8 November 1994. since 19991, SC Res. 827 0f 25 May 1993

3.4.2 THE NEED FOR NEW KM MODELS

According to Dunning (1997, 370) the geographical imbalance between the current 'technology revolution' and the 'population revolution' is a potential time bomb. The wealthiest 12% of the world population controls 85 % of the world's stock of created assets, while the rest owns or controls only 15 % of these assets. An increase of approxamately 50 % of the world population over the next five years will probably occur in the less wealthy part of the world. This imbalance can be addressed by Chinese and Indian economic development and removing the threat of ideological warfare (referring to the war between Islam and the West).

According to Parente (2001) the imbalances in the knowledge economy can be seen in the context of 'new growth models' which can be exogenous or endogenous. The 'exogenous growth model', also known as the 'neo-classical model' is a term that refers to a model of economic growth within the framework of neoclassical economics. A key proposition of neoclassical growth models is that the income levels of poor countries will converge towards the income levels of rich countries. However, since the 1950s, the opposite result has been observed. The developed world appears to have grown at a faster rate than the developing world, the opposite of what is expected according to a prediction of convergence. However, formerly poor countries such as Japan appear to have converged with rich countries, and in the case of Japan actually exceeded the productivity of other countries. However, the model does not take into account that the success of Japan was entrepreneurship and the strength of institutions, which served as catalysts for economic growth. It also does not explain how or why technological progress occurs.

Parente says that these limitations have led to the development of an 'endogenous growth theory', which endogenizes technological progress and knowledge accumulation. Endogenous growth theories usually rely on cycles to desribe an unstable pattern of events in search of equilibruim. Importance is given to the creation of new technologies and human capital. Organisations and individuals have an incentive to be innovative in order to gain an advantage over their competitors, thus improving productivity. The 'endogenous growth theory' has proven no more successful than the exogenous growth theory in explaining the income divergence between the developing and developed worlds. The main failings of these

theories is their inability to explain non-convergence, or why some countries are still much richer than others.

Nabudere (2006d) asserts that the creation of 'new growth models' that replicate the old models in order to rationalise state intervention and investment cannot be accepted. The idea behind the old growth model that assumed that production functions (land, capital and labour) operated independently in relation to economic growth was wrong. The use of standard economics and 'development theory' intended to inform and explain how economic growth was achieved through the three 'production factors'. Other variables such as social capital and tacit knowledge were ignored. It did not take into account the existence of different forms of 'capital' of which finance capital and indigenous knowledge were exploited without compensation. Furthermore, the old economic models were built on a mono-disciplinary approach that placed 'standard economics' above other human and social sciences, which demonstrated how science and tacit knowledge co-existed but were ignored or exploited. The recognition of other forms of knowledge is a prerequisite to the emergence of a model that places a premium not only on the stock of knowledge available to an enterprise, but even more on the capacity to learn new ideas.

Nabudere suggests a need for the revamp of educational policy and investment in education towards a more grass rooted 'learning economy' that responds to local needs and a culturally relevant 'knowledge economy,' to accommodate the pressure originating from the global economy, rooted in the solutions embedded in tacit knowledge and social capital. A new investment policy in education that recognises that knowledge is necessary for production is crucial in policy formulation.

Nabudere concludes that to reconstruct states that reflect the aspirations of Africans, people must consider the developments in the global political economy and link themselves to the positive forces within the global system in order to strengthen their local activities. Learning is no longer concentrated at a single location and scientifically and technologically related learning takes place outside the universities. Nowadays business, communities and several non-academic settings, where groups of people from different disciplines and institutions come together are centres of learning where boundaries that used to exist between academic and non-academic learning is becoming blurred as the 'excluded middle' is increasingly included. The 'learning economy' is a crucial aspect of 'knowledge-based economy', with the

emphasis on 'learning to learn' in different environments, with a connection between intellectual capital and social capital, a change in organisation towards functional flexibility and training of students on how to learn. Policies must work towards a new convergence, which recognises that knowledge is necessary for production, and that other communities seek interlocking networks of economic and social relationships on globally as Africa moves into a 'learning economy'.

A recent study by the Department of Industrial Psychology, University of Stellenbosch (Du Toit, Engelbrecht and Pooven 2006) revealed that traditional African values, although in congruence with many universal ethical values, place more emphasis upon collectivism, collaboration, caring, dignity and respect. It is argued that these values should underlie a value-based leadership style to enhance team performance in modern organisations through better integration and understanding of a multi-cultural workforce and the management of diversity with a focus on teams. As traditional European and American management concepts do not always provide for the needs of a diverse society in a process of economic and social development, the approach is based on local values, more specifically the value system of Ubuntu. Practicing the social values of Ubuntu in organisations would not only preserve these values in the modern business world, but would also lead to team effectiveness. A leader who has a values-based style of leadership, and who is aware of existing value systems within the team can achieve role modelling.

Mbigi and Maree (2005, 117) assert that the creative force of history is not ideology, religion or politics but the way in which people organise work and create value. The factory system that brought people out of cottage industry and feudal conditions was mass production that brought about the current, mass-consumption civilisation and the mastering of technology. The fame of the USA and the ascent of Japan was the result of mastering mass production and technology. The authors suggest that Africa mastered excellent production techniques and accomplished mass customisation before any other country in the world.

Furthermore, African clairvoyants and intellectuals must shift their attention from the politics of resistance to the politics of production. The fascination with European literature must change to fascination with their African roots, which lie in the traditional knowledge practices of Africa. It is only then that Africa will have the confidence to create economic growth. If companies are to be competitive in global markets, they have to learn to harness

the collective will, intelligence and energy of their people by creating enterprising communities through the canonising of Ubuntu. They have to select the best business practices and then create team practices that are in harmony with the values of Ubuntu, which means encouraging people to express themselves through the group.

According to the Council for the Development of Social Science Research in Africa (CODESRIA) some societies are marked by isolation, scientific marginalisation, extremely unstable material conditions, political repression, a devastating brain drain and lack of academic freedom. The challenge is to nurture, develop and sustain a productive, highly motivated community of social science researchers, transcending disciplinary, gender and generational barriers. A further challenge is the strengthening of the institutional basis of knowledge production by developing programmes of collaboration with other centres of social research in Africa whether they are national or (sub-) regional, university-based or independent. Moreover, in order to produce knowledge, numerous scientific activities and tools, whose value and impact are universally recognised, must be developed. These include:

- The publishing of high-quality documents, books, reference works, monographs, working papers, journals and periodicals.
- Development of training and publications programmes.
- Regional and international research programmes.
- Skilled individuals brought together in a diverse and productive intellectual community.
- Scientific data banks put at the disposal of the research community.
- Doctoral theses sponsored and brought to completion.
- Strengthen the production of knowledge capacity about Africa by Africans. (CODESRIA, 2006).

3.4.3 THE COLLECTIVE MIDDLE GROUND

During the Fifth Annual International Conference on Knowledge, Culture, and Change in Organisations (2005) it was concluded that there should be a consciousness of holistic understanding of knowledge necessary for short-term operational decisions, medium-term strategic formulation, and long-term normative frameworks. It was emphasised that a knowledge-era service organisation, which has the capability to capture, transfer, diffuse,

assimilate, disseminate and exploit knowledge for the development of competitive strategies in the organisation, is of the utmost importance.

According to Nabudere (2006b) social capital is a possible remedy for social problems and the weakening of civil society and a possible panacea for the inequalities generated by neoliberal economic development. Social capital is defined as the advantage created by the location of a person in a structure of relationships and explains how some people gain success in a particular setting through their connections to other people.

Putnam (2000) speaks of two main components of the concept social capital: 'bonding social capital' and 'bridging social capital'. The former refers to the value assigned to social networks between homogeneous groups of people and the latter to that of social networks between socially heterogeneous groups. Horizontal networks of individual citizens and groups that enhance community productivity and cohesion are 'positive social capital' assets.

Trompenaars (1993, 173) asserts that the hallmark of international or a trans-national structure is lateral connections between activities capable of being catalysed to the advantage of the whole network of subsidiaries connecting to subsidiaries. International and transnational structures allow one to synthesise the advantages of all cultures while avoiding their excesses. He argues the essential complementarity of values. With the proliferation of joint ventures and trans-national alliances the need to draw synergy (accomplishing more than the sum of the parts) from multicultural relationships became important. A climate of teamwork must be fostered for synergy to take place through multicultural team management techniques.

According to Grayson (1995, 1027) companies once kept their distance from community involvement. Today there is growing support from the business world for a wide range of community activities and commitments far beyond financial support that often involve managers being seconded or expertise shared. Organisations regard it not only as making good business sense but see it as an innovative means of achieving a competitive advantage.

Management in the new millennium prompted new creative paradigms of deep respect for the environment and real concern for their stakeholders as a fundamental strength as part of their value systems and business practice. The fundamental importance of values, especially the

value of relationships, became essential for business. Based on reciprocity and partnership relationships can form valuable resources of extensive knowledge and commitment to the generation and sharing of knowledge can be inspired in employees, suppliers and customers by a sense of connection with the company and those who share its values and objectives. (Clarke & Clegg 1998, 430).

In order to meet and achieve sustainable development goals in the context of globalisation, the interaction of the wealth of indigenous knowledge with Western knowledge is inevitable. At the heart of KM is nurturing this interaction to produce the desired outcomes. 'Formative interaction' takes place where new knowledge replaces pre-existing knowledge. 'Modifying interaction' takes place where scientific knowledge is adjusted slightly to understand the scientific reasons behind observations. 'Reinforcing interaction' takes place when scientific method confirms the knowledge of local people. KM should provide for the interaction of scientific and indigenous knowledge for sustainable development, allowing for innovative communication strategies to get the best outcome. A storage and retrieval mechanism is important to keep inventories of research results. As in the case of scientific knowledge, measures must be put in place to validate indigenous knowledge. Intellectual property rights, patents, benefit sharing and other mechanisms should be put into place to protect the custodians of indigenous knowledge. (Chiota 2005).

According to Sveiby, KM is a holistic concept of the highest strategic value. It is the art of creating value from intangible assets, focussing on business, not just learning. At the root of KM is the creation of a climate of knowledge sharing and creativity. An environment must be created for people to create, innovate, and share with management involvement. Although investments must be made in internet-based communications implying management of database content, the emphasis must be on people and the costly mistakes of the technology era must be avoided. Technology is a good tool for exchange but has a low return on investment. To use facts for competitive action the emphasis must be on people networking in the organisation in a collaborative and trusting climate. (Sveiby 2005).

Whereas the 1990s was the age of codes of conduct, the first decade of the 21st century will be known as the age of convergence. There are two types of convergence: convergence of performance standards and procedural convergence. It is easier to achieve convergence of procedural issues than convergence of performance standards. There has been an increase in

the bilateral forms of convergence, e.g. formal statements of mutual recognition to make corporate responsibility strategies more coherent, integrated and significant to a broader array of stakeholders. Procedural convergence can lead to accreditation and verification that is widely accepted, promoting the credibility of corporate responsibility. The present age is one of accountability where society increasingly holds companies and governments accountable for their conduct. The challenge still lies in methods to verify claims of corporate responsibility. (Leipziger 2003, 508-510).

Using the South African model of constitutional re-engineering, Dia (1996, 241) asserts that there are three major requirements for reconciliation.

The first requirement is the need for a new participatory process that focuses on building convergences between formal and informal institutions and on empowering beneficiaries and local communities. Reconciliation between indigenous groups and formal institutions brings together dominant societal values of indigenous cultures and technical and organisational ideologies supporting modern institutions. Convergence begins when both formal and indigenous recognise the need for sustained interaction. Renewing, informal institutions need to create relationships with adaptive formal ones, revolving around programmes and projects, releasing synergy between the interacting institutions and achieving institutional convergence. Dia cites the six phases in the South African reconciliation process as an example.

- Phase 1 involves definition and identification, meaning that the process begins with a comprehensive definition of a situation, including identifications of stakeholders, development paradigms, resource needs or any other important issue. The objective is to achieve desired outcomes within the constraints and capacities available. A resource audit of identified stakeholders is done, based on their capacity to provide skills, technology, capital, facilities, financial backing and the ability to muster community support. Information gathered through the resource audit should be displayed in an information centre where it would be accessible to all to be used in the following phase.
- Phase 2 involves lobbying, building on the information gathered in the previous phase. The key element is interpersonal contact among stakeholders, key community leaders and facilitators. The aim is to orientate, establish credibility, and to build

interest, enthusiasm, and finally commitment to reconciliation. The lobbying phase clarifies the social dynamics of the community, including the positioning of visionaries who can mobilise people. It is also during this phase that stakeholders establish legitimacy and trust through group participation.

- Phase 3 is the 'caucus formation and capacity building phase' during which a basic understanding of the reconciliation process is established. The different groups now get together to do an internal analysis and map out own strategies to follow. When conflicts break out, facilitators guide them to show the options available. During this phase, the stakeholders broaden their information base and capacity building takes place. Phase three can be revisited any time stakeholders require this.
- Phase 4 is the 'dialogue' phase. The objective of this phase is to generate a common focus and broaden common ground among stakeholders. Stakeholders now appreciate their differences and synergy is created by continuous interplay between disagreement and agreement. Objectives are prioritised and action plans agreed on. Joint working groups structure future relationships among stakeholders and develop plans before taking action.
- Phase 5 entails joint implementation when real empowerment takes place. Entrepreneurial development, coaching and training takes place so that participants can in future launch their own projects.
- Joint monitoring and feedback' takes place during phase 6. An information centre stores and updates project-related information. The forum launches a joint monitoring programme working on a schedule of key events and a timetable of review meetings. Relevant findings are displayed in the information centre and may be provided to the public.

The phases are not necessarily sequential and tend to overlap as reconciliation gains momentum. Furthermore, the process must be safeguarded against risks such as hijacking of the process for corporate or political agendas or a lack of resources.

The second requirement is a new communications system that ensures access and voice for beneficiaries and stakeholders who are quasi-literate in English and French. Information dissemination is of primary importance to empower beneficiaries and lend transparency to the process. In this regard Dia refers to the findings of Hagos (1993), based on studies done on the systems of the Tigrian Peoples Liberation Front (TPLF) and the Eritrean

People Liberations Front (EPLF) in Ethiopia, who outlined five major justifications for the centrality of traditional media resources to information dissemination.

- The first finding indicated that indigenous channels of communication could serve as powerful instruments of change. They reduce rural isolation and bridge the gap between the rural population and the national leadership. Face-to-face meetings and seminars were held in all villages. Messages from the villages were reinforces by musicians, art and storytellers.
- The second finding demonstrated the superiority of a cultural based channel of communication over technological-based mass media. In the past inappropriate communication strategies prevented participation of people in the rural areas. Hagos found that by blending traditional and modern systems of communication and converting modern one-way media into interactive two-way channels could maximise the impact of messages. The findings exposed the shortcomings of modern media if the cultural dimension of communication is not considered. In this case, cadres were used as link between modern radio and the rural audience.
- The fourth finding is that indigenous institutions can adapt to the demands of the day.

 When institutions were found to be dysfunctional for communication, the organisations modified some and created new systems to strengthen communication.
- The fifth inference indicated that Africa has the capacity to build on its own media resources. With clear policy, strong political will and appropriate human resources Africans can effectively use their own resources.

Dia identified issues for further study, which were not covered by Hagos:

- Implementing and institutionalising the use of traditional modes of communication to ensure that those affected participate fully in the decision-making process.
- Determining the credibility and accessibility of traditional institutions in the required context.
- Determining the effect of organisational culture on the effectiveness of a communication medium.

The emphatic learning and action model (The ELA Model), developed by the Ghanaian agronomist David Millar, focusing on small-scale agriculture, deals with the intuitive

understanding of cultural relativity in development, the belief that all indigenous knowledge (empirical as well as normative) is essential. Bilateral transfers in a context of mutual relative autonomy, recognition of different roles by gender and joint experimentation are led by local cosmology and redistribution of power. The goal of the ELA Model is integrating change, guided by the preservation of local culture to be achieved through reconstruction of local cosmological vision and joint experimentation. The model proposes a set of parallel, complementary processes of experimentation and dialogue platforms.

- Acknowledgement and entry of the community
- Building of relationships, acceptability and recognition
- Analyse difference in paradigms ('ours' and 'theirs')
- Determine different methods ('ours' and 'theirs')
- Confrontational Dialogue
- Designing of Action Plans ('ours' and 'theirs')
- Joint execution
- Joint Learning Dialogue ('Common Platform')
- Designing new action with new knowledge
- Joint execution
- Experience sharing dialogue to build capacity, establish networking, extend activities, and create policy and endogenous development.

Nabudere (2006b) cites the example of Europak in South Africa that implemented the practices of Ubuntu in the work place. Workers are brought close to management in a system of consultations and regular meetings with management in workplace forums. For instance, if an offence is committed the offender appears before a production-line team. If the apology of the offender is accepted, the worker must choose the punishment.

A further example is that of the Nguni Cattle⁷ Project of Fort Hare. Ten years ago, Professor Jan Raats, Executive Dean of the Faculty of Agriculture at the University of Fort Hare,

⁷ Although highly prized in African culture, Nguni cattle are not traditionally viewed as animals of commercial value. Rather they are valued as a stock up of wealth and outward sign of status, which is judged by the number of cattle a man owns. The cattle are only traded as a last resort or if a special occasion such as a wedding or 'lobola' (dowry) needs to be paid for. The Nguni is indigenous to Africa, unlike most other major breeds that originated in Europe. The Nguni moved from the Great Lakes region down the East Coast of Africa into Southern Africa and with the nomadic Khoi people, reaching the Limpopo River some 2 000 years ago. Over centuries, the breed was exposed to diseases, ticks, parasites, and food shortages, in the process becoming hardy evolving mainly by natural selection.

proposed that a partnership be created between traditional farmers and commercial breeders. The long-term objective of the project is to develop an international niche market for organically produced Nguni beef. The whole community is involved. A unique characteristic of the model is 'passing on the gift', meaning that within five years each community is required to return the gift of ten heifers and two bulls from the offspring of their Nguni herd. The process is easy, as helping the next person is part of the African culture of Ubuntu. The producer gets 50 percent of the benefit back in his own pocket. A further important component of the Nguni Cattle Project is the training of livestock managers. In each of the selected communities a young person is appointed to manage the project on the ground as an 'Nguni inspector' and to register the stud animals online. The Nguni Cattle Project today is a Southern African project that promotes entrepreneurship, job creation and rural development across the region. The Development Bank of Southern Africa, the Industrial Development Corporation and Adam Fleming, a British banker, are involved. Daimler-Chrysler has also committed to the project and will use 40 000 Nguni hides in export Mercedes vehicles. (Fuller 2006).

3.4.4 THE GLOBAL NETWORK SYSTEM

According to McKern (1995) the network organisation became better suited to manage the new global context. Furthermore, organisations that succeed in modifying organisational processes around vision, information and entrepreneurship became the most adept in meeting international competition in the 21st century. Managerial practices had to be modified to deal with tension, implicating the increasing tension of linkages and the inherent conflict in an international network of product-line, geography and function. The key to modification of processes is suggested as

- Simplifying the vision or strategic intent of the organisation to focus the attention of middle- and operational managers on the key implications of the organisational strategy.
- Rationalise information to empower middle and frontline managers not only to do planning and control function, but also to cope with the new complexity.
- Encourage entrepreneurship at the front-line to make quick decisions in a rapidly changing environment.

Gerlach and Lincoln (1992, 491-527) introduced the hypothesis that organisations having ties that are more meaningful, crossing hierarchical levels and functional boundaries, will be perceived as being network organisations. Those without such ties will not. Ties can be defined as absolute (friends and family) or relative (based on social interaction). Relative ties depend on perceptions and evaluations of each party about ties to the other and the relative importance of a tie to the other, taking into consideration power and dependency. Knowledge on how to build networks can be obtained by studying individual managers who have been successful in creating a network organisation, which is characterised by decentralised decision making, improved customer service, attention to quality and cross-functional integration. Networks best facilitate aspects such as

- effective flow of information;
- profitability (the author concedes that it is difficult to demonstrate);
- job satisfaction and a feeling of efficacy among employees;
- communication among members of large teams involved with trans-national customers;
- product development networks that reduces the length of the product development cycle; and
- articulation and implementing a firm's strategy

Methods need to be developed to provide managers with a more complete view of the network, for example personal computers linked in a network. It is also useful for managers to know the ties of others but it is unlikely that the manager will have a whole picture of 'connections among connections'.

Arquilla and Ronfeldt (1996) propose that the network appears to be the next major form of organisation after tribes, hierarchies and markets to define societies as humankind's finest form of organisation. In a network, ties are charted among actors in a particular context and can be depicted in the form of a chain (where information flows from one actor to another) and a hub (actors linked to a node). Networking is a moral relationship of trust, consisting of a group or individuals who share informal norms and values beyond those required for market transactions. The functioning of a network will depend on how well members are personally known and connected to each other and the degree of trust and loyalty.

Arquilla and Ronfeldt (2001) say that networking is replacing hierarchies and that power is migrating to non-state actors. Subsequently the direction of communication is changing and the role of norm and values in a state is changing. The levels of analysis in a network and the management of the network are addressed. The inter-agency approach poses new challenges to the nation-state.

Expanding on the basic network theory, Cochrane (2003) discussed the phenomena of 'supernodes' describing it as a node with clustered assemblies around it, allowing for a degree of separation between two people of never more than six. Super-nodes can be a manager, an ISP linking to an international hub (rendering separation much smaller). If a super-node fails, knowledge can be rerouted around it, allowing success despite pockets of disastrous management.

According to Mills (2000) the future of globalisation will require not only greater expertise in public diplomacy but also better government-business interaction and sharing of information, taking in consideration security, accuracy and use of technology. Improved use of public sources and relations with these sources are required. The costs and benefits of bilateral and multilateral ties must be considered.

Fukuyama (1994: 194-196) asserts that with technological advances, networks replaced hierarchies and the notion of spontaneous order came into existence. Fukuyama use the example of termites: the order is not designed by anyone. In the same fashion, world-order was created by an irrational process of evolution and natural selection. Social order is not only hierarchical and centralized, but also decentralised allowing for spontaneous interaction of individuals. In the world of politics, hierarchies have gone into decline to be replaced by informal, self-organised forms of coordination. Centralized, authoritarian corporations and authoritarian states are failing, because they cannot deal with the informational requirements of an increasingly complex world. Fukuyama uses the example of the USSR that was unable to keep track of knowledge created on the periphery. Quinn, Anderson and Finkelstein (1998, 181) emphasised self-organising networks by professionals to create and add value to knowledge.

According to Kuldzun and Langenberg (2005, 13) the transfer of tacit knowledge holds major challenges. Communities of Practice (COP) are seen as ideal vehicles for leveraging tacit

knowledge, consisting of experts working together in a common area of interest sharing information, insight, experience and tools to solve problems in their area of expertise. COP became accepted tools to overcome organisational, regional, and national boundaries in the modern company. To make communities work within a trans-national framework one has to consider the knowledge dimension, individual and cultural dimension that influence COPs and their deployment. The knowledge dimension involves any issue the organisation finds of interest during which explicit or tacit knowledge is shared. The individual dimension requires strong community identity, built on mutual trust, sharing insights and developing common work practice. A shared goal and fully dedicated facilitator is essential. The cultural dimension involves knowledge exchange in a supportive, trustful and fault tolerant culture crucial for success.

3.4.5 EVALUATION

Literature implies that the African economy can only converge with the global economy through entrepreneurship, strength of institutions, the creation of new technologies, and the linking of intellectual capital with social capital and with the traditional production factors towards mass production.

Africa can contribute to convergence between the developing part and developed part of the new economy if knowledge, including the tacit knowledge embedded in African culture as a vital production factor, is recognised by all. To achieve that, the intellectual and social capital of the African knowledge system situated in traditional African value systems such as Ubuntu, religious practices, ideological thinking, and modern educational institutions must meet in a trans-disciplinary middle ground to establish learning as a vital aspect of participating in global context.

New knowledge is created in a collective middle ground, characterised by collectivism and a holistic synthesis of values and worldviews. The purpose is to learn, find innovative solutions and to activate. Combined with excellence in the use of technology and management diversity, it should contribute to mass production as part of an African Renaissance that seeks to converge with the new global economy.

The interconnected nature of African cosmology presents a structure of relationships that can only be described as positive social capital. African society posesses vast bonding capital because of an extent of homogenety in tems of cultural characteristics, a homogenety that is possibly compromised by different religious influences (Islam vs Christian) and different colonial experiences, but reinforced by overlapping traditional knowledge practices.

The challenge lies in developing bridging social capital to network horizontally in a heterogenous international environment to create knowledge for the enhancement of production by both the community and the trans-national organisation. Most trans-national organisations involved in Africa are by now conscious of bridging ventures and ready to connect with African communities in a quest to synthesise cultural values through team work where the community and the business can complement each other.

An increased awareness of benefit for all was found despite the reality of trans-national organisations seeking to benefit from knowledge for business purposes. If this assertion is true, the African community must assure that the social capital entrenched in African knowledge systems are valued in a spirit of mutual respect and recognition of the productive power of IKS in Africa. However, it is on the level of shared values where both the community and the business are confronted with challenges and the need to find instruments in order to ensure complementary and equal relationships.

The emphasis is on detail on how to achieve convergence of worldviews and synergy of knowledge through interactive communication. The model of Dia describes the equalising of power relations and emphasises the superiority of indigenous knowledge systems over technologically driven knowledge systems in an African context. The importance of clear goals and objectives is implied, including the suggestion that both the community and the organisation should developed strategies to find a middle ground. The vital role of leadership, including the role of the facilitator, in reaching convergence is emphasised.

This ELA Model reflects a high level of recognition and inclusion of normative aspects of African knowledge and acknowledgement of the importance of cultural diversity for a holistic knowledge picture. Moreover, the method of transfer and synergising of knowledge through interaction between the organisation and the community is clearly depicted in terms of an equal power relationship. The model does not expand to dwell on issues such as

leadership and the creation of new knowledge, although it is clearly implied as an outcome of planned and intense interaction.

Europak and the Nguni Cattle Project are examples of how organisations can find convergence and middle ground through specific projects where the indigenous knowledge inherent to Ubuntu can be used by multi-cultural and trans-disciplinary teams to cross boundaries between the corporation, research institution and the indigenous community. In these examples, the mutual respect and benefit of alliances in Africa are experienced with the research institution serving as centres of knowledge excellence linking with the traditional knowledge of Africans, addressing the historic imbalances within South African society.

Successful convergence between the activities, including KM activities, of trans-national business and the African community depends on the synthesis of vision, values and strategic intent of the business and community. The extent of synthesis will determine what other instruments should be put in place to ensure convergence, especially instruments that would ensure not only procedural convergence, but also spell out the responsibilities of all parties, allowing for verification of adherence.

It is only the combination of shared strategic frameworks and formal regulatory instruments that would ensure meaningful bridging of the already porous boundaries between heterogenous trans-national (sometimes also multicultural) business and collaborative and interconnected African cosmology to synthesise in a trans-disciplinary middle ground not only to the benefit of advantages in competition for the business, but also for African society to contribute to the ultimate convergence of developed and under-developed.

The concept of COP appears to be a workable way to share and enhance knowledge in an organised and formal way in an atmosphere of trust and support with facilitators continuously removing obstacles to sharing in an effort to reach synergy of ideas. It is especially in the homogeneous community and organisation that COP will be a viable tool, but also in the multi-cultural and trans-national environment where it can be implemented with dedicated leadership and facilitation.

Because of increased connectivity, people become more knowledgeable themselves. It is important for leaders and managers to tap into this new and dynamic situation to use the

understanding of people and to create new knowledge exclusive to the task on hand. Africans, and people in Africa, become less and less isolated from the outside world and personal knowledge increases every day. When added to the affluence of indigenous knowledge of the African, organisations in Africa and organisations dealing with Africa need to be aware of the personal knowledge of the modern African and its value to innovate.

These theoretical propositions assert that KM in Africa cannot be studied from a holistic point of view without considering the aspects of networking in the world. International diplomacy remains an important variable as part of a global network system. The tradition of diplomatic interaction among governments is an important practice of incorporating the transnational organisation into the realm of official diplomacy; especially about the sharing of information on issues such as conflict prevention and implementing the principles of international justice.

In this context, it is important to note that networking is not the prerogative of the nation-state. Non-state actors and non-geographical interest groups play an increasing role in networking and sharing of knowledge. Furthermore, networks consisting of knowledge-based institutions such as universities, multi-national companies and NGOs as part of civil society are the critical mass of the global knowledge network in search of an inter-disciplinary middle ground among more entities than just state structures and business.

The challenges of corporate responsibility, including trans-national organisations (including business and political) being held responsible for the consequences of human rights abuses and crimes against humanity, were identified. Corporate responsibility as an enabler or driver of KM becomes important in the context of adherence to shared universal values such as humaneness, and requires from the organisation to have knowledge of dysfunctions in those parts of African society that could lead to human rights abuses that could be linked to the trans-national organisation. To claim lack of knowledge becomes less and less of an excuse in the modern global economy.

The evaluation articulates the practical needs for networking in Africa. What is of significance here is not only the need for improved electronic connection but also a strong emphasis on human interaction. Furthermore, the need to sensitise role players in Africa on the need to manage knowledge, is identified. The way in which human and electronic

networking in Africa takes place and the way the resulting knowledge is managed form an important part of this study. Network theory provides important indicators for the researcher investigating KM. The following concepts are prominent:

- Networking as KM practice for addressing imbalances in the new global economy, conflict management, international justice, socio-economic development and political emancipation.
- The entities involved and method of communication (especially the balance between electronic and human interaction) among entities in Africa, including all role-players, state or non-state.
- The communication distance and flow of knowledge between role-players on the Continent.
- Identification of super-nodes in Africa and the type of knowledge flowing in and out of these nodes.
- The importance of trust, confidentiality and perceptions of African networks and networking with Africa.
- The costs and benefits of networking, especially on processes and outputs of the organisation.
- The consciousness and skills of political leaders, managers and employees (including knowledge workers) to do networking and manage the complexity of formal and informal networking.
- The security implications of networking.

3.5 FINDINGS

When the literature on the principles and practices of how business is managing knowledge was analysed it was found that KM is an art and a science to convert, develop and leverage what people know into a substantial resource that is used to make defendable decisions and actions. KM implies that every structure, whether it is business or society, is a knowledge nodal point or centre, which forms part of an interconnected network or chain of communities or businesses as part of a global network. Within structures, it entails the merging of knowledge from all knowledge domains, whether it is normative, analytical or empirical, into new value-added holistic knowledge products. This tangible product aims to provide a holistic understanding of a specific subject, making leaders aware of influences from the external environment and to find solutions to achievement of the objectives of the

organisation or community, which may not be the production of knowledge for the sake of production, but addressing dysfunctions in the organisation with regard to conflict resolution, productivity, competitiveness, self-empowerment, self-emancipation, freedom, justice for all and the maintenance of human rights.

Through holistic understanding the community or organisation is able to perform defendable operational action; formulate workable medium term strategies and realistic long term visions. On the trans-national and trans-societal level, it means interaction among knowledge centres and within communities and organisations to share knowledge in a network characterised by trust and benefits outweighing the costs. For successful interaction among entities and within nodes, knowledgeable and wise people from different cultures and disciplines are required, including strong leadership and specialised knowledge workers in cross-functional and cross-border communities of practice in a spirit of collectivism. In the communities of practice intellectual capital creates 'information space', provides guidance, enhances own personal knowledge, creates new knowledge for others, manages and uses ICT, evaluates, interprets and uses knowledge.

KM in Africa would require the revival of the collective memory of the causes of strife and violent conflict and the principles and practices through which these were resolved before the imposition of foreign values which caused severe dysfunctions in an already imperfect social system, foreign values which could not cope with intensified instability and conflict.

From the literature review it became clear that the reinstalment of values is needed to manage knowledge, for instance for the prevention, resolution and management of conflict in Africa. This new set of values would include abstracts such as holism, pluralism, cross-cultural understanding, trans-disciplinary insight, mutual trust, mutual respect and values-based leadership. To an extent, these values are already present in both the African society and the trans-national organisation. African society needs to reawaken to promote value systems such as Ubuntu, the holistic characteristics of the African worldview, inclusive and pluralist religion and values formed by modern education. These values can be shared intra-actively and collectively with modern trans-national businesses that seek African partnerships in a collective middle ground to reach convergence of knowledge, which would enable creative, re-creative and transformative growth for all partners.

On the side of the trans-national organisation, corporate responsibility towards African society, articulated through clear vision, strategic intent and concrete planning, is required to manage knowledge. KM must reflect consciousness of the consequences of human rights abuses and outdated values such as vertical power-relationships, partnerships purely for the purpose of economic exploitation and patterns of production based purely on capitalist market forces, ignoring the seasonal patterns of nature and enabled by the dominance of Western education and technological power.

The following KM aspects need to be researched through field-work to identify concepts that would form part of a framework for the management of indigenous knowledge in Africa.

- How African society and multi-national business manage knowledge, together with other production factors, towards transformative growth, increased production, innovation, social and economic self-emancipation and societal equilibrium.
- How the African community and the trans-national organisation convert 'tacit knowledge' into 'explicit knowledge' through expert knowledgeable people from different knowledge backgrounds and disciplines who are capable and willing to learn from each other, interact and do formal research, share understanding, focussing on a combination of verbal interaction and the use of technological instruments.
- How the African society and the trans-national organisation use policy frameworks that ensure that business strategies, operational plans, corporate responsibility plans and internal structures reflect the KM approach.
- How the trans-national organisation and African society manage knowledge, not only knowledge based on a Western worldview or capitalist principles, or from an internal scope of observation, research or internal sources, but also to include African knowledge through understanding of the cultural idiom, symbolism and the spiritual dimension of African knowledge.
- How the knowledge foundations of trans-national organisations and African society converge in a collective middle ground, specifically with regards to common values such as peace, justice, trust, respect and humaneness, as well as good practices such as cross-cultural communication, trans-disciplinary insight and a holistic understanding of phenomena.

- How trans-national businesses and communities manage the power relationships between them, especially the way African society collaborates equally in global context as affiliates or partners in alliance with trans-national business, avoiding cultural domination and control through technology, including formal regulatory instruments that prescribe procedures and protection measures.
- How African society and the organisation protect confidential knowledge and the knowledge of partners, including indigenous knowledge.
- How cultural awareness, consciousness of expectations of African society and holistic understanding of phenomena is developed through learning to enhance the intellectual capital of both the trans-national organisation and the community it is involved in.
- How intellectual capital from both the community and the trans-national organisation (leadership, managers, facilitators and expert knowledge workers) uses positive social capital, value-based leadership and diversity management to manage trans-disciplinary, cross-functional and trans-national teams, inter-cultural communities of practice effectively to form centers of knowledge excellence.
- How networks of business, researchers, the community, government and other institutions (including those on the periphery) converge to collaborate and manage knowledge, using ICT or other traditional methods of communication.
- How African society and the organisation succeed in synthesising knowledge to produce a renewable knowledge product with a holistic perspective that would enable wise decisions and actions that meet the expectations of empowerment, emancipation, innovation and competitiveness of African communities, including those on the periphery of society or in conflict, while fulfilling the mission of the trans-national organisation.
- How the 'higher minds' (people who are considered by others to be 'wise') from both society and the organisation create a higher level of understanding by displaying intuition, insight into occupational principles and practices, as well as instinctively considering values to interpret information, or judge the impact of knowledge, on visions, policies, strategies and plans.
- How the knowledge product is disseminated to a network of collaborative entities such as government structures, the AU and regional economic communities (RECs) to activate people, especially with regard to aspects such as conflict management and resolution.

CHAPTER 4: AFRICAN KNOWLEDGE AND KNOWLEDGE IN AFRICA

'The Spirit of Ubuntu. That profound African sense that we are human only through the humanity of other human beings-is not a parochial phenomenon, but has added globally to our common search for a better world'- Nelson Mandela

4.1 INTRODUCTION

In Chapters 2 and 3 several theoretical concepts of knowledge and knowledge management were identified. The purpose of Chapter 4 is therefore to review the literature on knowledge in Africa and African knowledge to see what concepts of knowledge manifest in the African context.

Literature was selected, based on theories of knowledge and KM that can explain what African knowledge and knowledge in Africa is, and what knowledge variables should be managed to achieve specific outputs from an 'African knowledge system'. The origins of African knowledge, knowledge in Africa and African knowledge, the role of religion and ideology, science and African knowledge and the holistic nature of African knowledge will be discussed.

4.2 AFRICAN KNOWLEDGE

Theory indicates that African knowledge is found in a complex episteme, which originated in Eastern and Southern Africa, developed in Black Egypt during ancient times, then transcended time and space spreading through Africa, and formed the basis of Greek and eventually European philosophy. The African knowledge system is characterised by a holistic cosmological view, formed through habitual synthesising and networking, absorbing all knowledge inputs through the ages. From the following literature, it is evident that there is a need for the production of emancipatory knowledge as vital for the economic and spiritual self-liberation of Africans.

4.2.1 THE ORIGINS OF AFRICAN KNOWLEDGE

According to Cook (1974, 230-234) the 'Ancients' testified that first the Ethiopians and then the Egyptians created and developed civilization while other people, including the Eurasians, were still barbarians. He explains it in terms of the material conditions in which geography

placed them, which required the invention of sciences, art and religion. Black Africans created mathematics, astronomy, the calendar, general sciences, arts, religion, agricultural techniques and architecture.

Pharaonoc Egyptian civilization was a black civilization, decisively influencing thinking on African knowledge systems. The Egyptian civilization was born in the interior of Africa belonging to a black race, which first settled in Ethiopia, later following the Nile to the ocean. (Cook 1974, ix-x).

Obenga, (1995, 73-74) affirmed that in the first century BC Diodorus of Sicily wrote that he had observed that the practices such as the College of Priests of Nubia and Ethiopia were similar to those of Egypt. Olela, (1998, 45) concluded that Sais (Egypt) was the intellectual centre of the world and inhabited by Africans. They were known for their fixed cosmological views and their speculation covered the whole realm of human knowledge including metaphysics, ethics, astronomy, mathematics, science and medicine.

Many scholars consider the Old Kingdom of Egypt (also called the Memphis Kingdom) that began about 2700 BC as the most significant period in the development of African knowledge. During this period the first civil and religious laws, writings and artistic canons were created. Egyptian writing (hieroglyphs) is the most important legacy from Egypt, unlocking a wealth of knowledge about the ancient world. (Chalaby 2006, 16). Early examples of important knowledge creation are the development of writing, mathematical knowledge, a calendar and medicine in Egypt and the study of planets and stars in the belief that the universe follows rational principles. For instance, during the Third Dynasty of King Zoser, the first record of the trans-disciplinary scholar Imhotep was found. He was the chief physician, sage and scribe to King Zoser, chief lector, priest, architect, astronomer and magician. During this period, Egypt made advances in astronomy and the therapeutic use of plants, but did not have a thorough knowledge of anatomy because of religious beliefs. (Chalaby 2006, 2-5).

After the First Interim Period in Egypt (from about 2180 BC) the Middle Kingdom started about 2060 BC. During the reigns of Montu-Hotep II and Montu-Hotep III commerce with the Red Sea and Nubia intensified. By 2000 BC, Amon-Emhat had extended the Egyptian frontier into the heartland of Nubia, nowadays Southern Egypt. A Second Interim Period introduced Semitic influence from outside Africa in the form of an invasion by people called

Hyksos. By 1622 BC Ahmose defeated the invaders and pursued them as far as Palestine, afterwards uniting Egypt under his rule. During the New Kingdom (from about 1580 BC) interaction with Asia intensified when Tutmose III extended the Egyptian border to the river Euphrates (nowadays Iraq) and to the fourth cataract of the Nile (border of the current Sudan). The Third Interim Period brought closer interaction with the rest of Africa and spreading of knowledge when an Ethiopian king ruled Egypt from the Sudan. (Jackson 2001,14)

According to Egyptian teachings humankind derived knowledge from Thoth, (called Hermes by the Greeks and Trismegistus Hermes by the Romans) who wrote all his works under the inspiration of a supreme God. (Chalaby 2006, 16). Hermes and his identity were merged with that of Thoth, the God of esoteric knowledge and wisdom who later, as Hermes Trismegistus, was seen as the author of the Hermetic texts and scriptures in which all knowledge was believed to be embedded (also see 2.6.2). Thus, in the original Egyptian meaning, Hermes was not just an interpreter; he was a messenger between Zeus and the mortals. Crossing other boundaries, he became a messenger between Zeus and the underworld, and between the underworld and the mortals. It was also believed that he mediated between waking and dreaming, day and night. Hermes was not just as an interpreter of messages, but a character that could listen to the messages, understands it, and then passes it on to listeners. (Heidegger 1971).

Diop (1980) demonstrated that mathematical formulas such as those of Pythagoras were replicas of Egyptian mathematics and that the pyramids in Egypt could only be erected through employing an empirical and scientific approach and method. African knowledge was empirically acquired and passed on from generation to generation.

From approximately 500 BC, a period of general dispersal and subsequent clashes among the people of North Africa was prompted by a lower rainfall in the Sahara. The use of stone was also replaced by that of iron. Iron-pointed armament now allowed for the exploration of unknown territory and iron tools brought new agricultural possibilities. Iron working marked the foundation of the Africa we know today. Continental Africa gradually entered the 'Iron Age', associated with a growth in population and the expansion of Bantu-language people who inhabited Africa south of the Sahara. According to linguistic evidence the Bantu emerged from West Africa, Lake Chad area (nowadays Nigeria and Cameroon), migrating

slowly southward into the Congo grasslands. Some groups went east and then south into the Eastern Congo grasslands. From the Congo River basin, further diffusion took place through the plateau grassland (today Northern Angola and Northern Zambia) moving south and continued absorbing the Late Stone Age cultures, which still existed there. (Davidson 2001, 19-21).

During the fourth century, Christianity came to Africa when it became a state religion in Axum after the Roman philosopher Melopius was killed by Axumites in a Red Sea Port. His relative Frementius, who survived, became the first bishop of Axum after being raised in Alexandria. Later Christianity became the main religion of the people of Abyssinia (Ethiopia). During the sixth century, the Nubians became Christians and remained so for many centuries amidst peace and prosperity. Cut off from the rest of the Christian world from 640 AD to 642 AD during the Muslim occupation of Egypt, they progressed and dominated Upper Egypt by 745 AD. To the west, their influence could have stretched as far as Western Darfur in the Sudan. (Davidson 2001, 116-120).

From 640, Islam reached into Africa when the religious and political revolution engulfed Arabia, Syria and Egypt. Through merchants and traders, the rule of Islamic law proliferates to West and East Africa, which had a profound influence on the belief systems of Africans. Apart from a new language (Swahili), which developed in East Africa a blending of Arab, African, Indian, Islamic and Christian values took place, manifesting in about 700 AD. Political stability and economic development followed. A new age of learning and knowledge sharing began. Scholars visited the libraries of the devout to study the many thousands of available documents. The countryside was penetrated by scholars spreading the beliefs of Islam and taking over the characteristically African concept of spiritual power vested in a particular person (priest or wizard). Muslim leaders acquired a mystical authority denied to them by orthodox Islam, especially in West Africa. Philosopher-kings, scholars of stature, ascended the throne in Hausa Land and the Mujaddidin (revivers of Islam) and Talibs (scholars) became the intellectual leaders in West Africa. With modernisation came schools of Islamic leaning in Timbuktu, Niani, Jenne and elsewhere. (Davidson 2001, 125-136).

From about 800 AD to 1000 AD, the whole of Africa entered an age of agriculture, with metal-using technology and characteristic religions. A social and political organisation, ranging from powerful states like Ghana to systems of village democracy, laid the foundation

for the growth of civilization. Magical and supernatural explanations were adopted to explain reality that could not otherwise be elucidated. Such explanations became interwoven with religious beliefs. African religions and beliefs were articulated by the rhythm of dancing, playing of drums, woodcarvings, the conservation of shrines for gods and ancestors, and the practicing of 'magic'. Art became the literature, the holy books and the poetry of African beliefs. (Davidson 2001, 144)

In the early 15th century, the improvement of sailing technology and navigational techniques enabled Europe to expand its influence far beyond its borders. This development resulted directly in the slave trade and the outflow of African knowledge in the agricultural sector to other parts of the world.

From the early part of the 14th century to the time of the Moorish invasion in 1591, the city of Timbuktu and the University of Sankore in the Songhay Empire was the intellectual centre of Africa. During the fifteenth century strong political and social entities flourished, for example the ancient Luba Kingdom in the southern Congo basin and the Kingdom of the Congo in West and Central Africa. Black scholars were enjoying a renaissance that was respected in most of Africa and parts of Europe. (Jackson 2001, 21).

In 1600, Leo Africanus described Timbuktu as a big market for manuscripts and books from the Berber countries and said that more profit was made from the sale of books than from any other merchandise. Furthermore, the notion of religious identification with ancestors and beneficial magic as a belief system continued. By 1700 knowledge in Africa flourished. (Davidson 1991, 73).

By that time, modern engineering was used in Europe, and there was a need in Africa to advance from being an Iron Age society. Africans could no longer defend themselves based on traditions and old modes of organisation. The 'power gap' between Africa and the industrialised nations became disastrously wide, reducing Africa to an underlying dependence. However, the history of Afro-European contact of pre-colonial times could not produce transformation. One of the reasons was the dynamic strengths of African systems of self-rule, which enabled people to master and populate the continent by native ideologies and methods. African systems proved capable of almost infinite adaptability to circumstances

and challenges, characterised by flexibility, tolerance and insight into the problems of 'man-in-community'. (Davidson 2001, 309-310).

By 1900, the greater part of Africa urgently required a renovation of industrial science, mechanical production and new social relationships. However, colonialism failed to provide this renovation. After colonialism, Africa could never be the same. Indigenous life could not contain or absorb the eruptive methods and technologies, which wrecked indigenous structures beyond repair, even as remote as the rain forests of the Congo. Colonial education had no meaning and was not useful as an instrument of cultural enlightment. The troubles of Africa today derived partly from the colonial heritage but also from the need for structural transformation. (Davidson 2001, 321). Unfortunately, during the nineteenth century imperialism contributed to the breakdown of traditional cultures, including those of the African. Contempt for indigenous cultures undermined the social structures of Africa.

An Afrocentric approach developed out of the experience of African Americans to find African identity as a philosophy and methodology of self-understanding. Asante & Abbary (1996, 6-7) defined 'Afrocentricity' as the belief in the centrality of Africans in postmodern history, and a liberation ideology.

These scholars also drew on ancient writings, which stated that Greek thinkers studied in Egypt and copied ancient Semitic wisdom. Such views were associated with radical thought that rejected classical Graeco-Roman culture as the model for civilisation. Afrocentric scholars argue that apart from technical knowledge that has been developed by positivist methodologies and practical knowledge, there is also emancipatory knowledge for self-emancipation of Africans and their descendants. Emancipatory knowledge must build on practical knowledge to enable Africans to establish theoretical models for investigation. Several publications sought to counter the prevailing view in the West that Africa had contributed nothing to human cultural history that was not the result of incursions by Europeans and Arabs. These journals sought to stress the blackness of Egyptians and to investigate Sub-Saharan African history. Today most 'Afrocentric' scholars follow a paradigm of world history centred around assumptions which emphasizes the black beginnings of humankind and black contributions to world history challenging the Eurocentric view of European accomplishments and racist assumptions of world history which devalues or ignores the achievements by Africans. (Nabudere, 2006a).

In the Diaspora, the work of philosophers such as W.E.B. Du Bois, Marcus Garvey and Frantz Fanon has been the most influential. Du Bois researched West African culture in an attempt to construct a Pan-Africanist value system based on West African traditions. He strived for the emancipation of 'coloured people' who suffered because of colonialism. In 1933 he described Pan-Africanism as intellectual understanding and cooperation among all groups of people of 'Negro' descent in order to bring about the spiritual and industrial emancipation of the people. Du Bois envisaged neither racial war nor opposition, but broader cooperation with the white rulers of the world and the chance of peaceful and accelerated development of 'black folk' (Uye 1971, 158).

Marcus Garvey followed a more radical approach and dedicated himself to the cause of the black race. His work instilled renewed self-respect among blacks and he is considered a central figure of the 20th century with regard to Black Nationalism and black power. Garvey inspired people like Kwame Nkrumah through publications such as *Philosophy and Opinions*. (Weisbord 1970, 419-428).

The work of Frantz Fanon, especially his book *The Wretched of the Earth*, influenced anticolonial and anti-imperialist movements in Africa. Like other authors, Fanon maintained that the people of Africa could not contribute to society until their self-respect and a feeling of self-worth had been restored. Among many important aspects in his work were his thoughts on the relationship between the urban elite and the rural masses on the periphery and the question of neo-colonialism. (Grohs 1968, 555).

4.2.2 TRADITIONAL AFRICAN KNOWLEDGE

Turnbull (1963, 19) attempts to describe African knowledge after spending time with Mbuti ('Pygmies') in the Ituri region of the Congo region:

'They did not have to cut the forest down to cut plantations, for they know how to hunt game of the forest and gather the wild fruits that grow in abundance, though hidden to outsiders. They know the tiny sounds that tell them where the bees have hidden their honey, they recognise the kind of weather that brings a multitude of different kinds

of mushrooms springing to the surface, and they know what kind of wood and leaves often disguise the food. They know the exact moment when termites swarm, and when they must be caught to provide an important delicacy (a mystery to any but the people of the forest). They know the secret language that is denied all outsiders, making life in the forest for the latter impossible'

The description of Turnbull shows how people (like all other people in the world) rely on nature and how they are informed by their interaction with their natural environment. However, care must be taken not to generalise the knowledge of isolated communities and apply it to all African knowledge, as it may create a misconception of African knowledge as being primitive. Literature by other scholars shows African knowledge to be more sophisticated, going beyond the natural environment.

Ntuli (2002, 57) explains that the worldview of traditional Africa has similarities with some aspects of quantum physics. Africans examine the world through a perspective of wave-particle duality, complementarities and uncertainty, interconnectedness and non-local correlations. Africans see a mind-body while Westerners see body and mind separately. The African worldview rejects separation of the self from a phenomenal world and perceives human beings and the rest of the universe as an extension of each other. A harmonious balance between human and nature is expected. The African worldview permits endless alliances through cultic acts that invoke spirit powers and life forces. African thought sees life as a cycle, an interconnected reality and a whole. Survival depends on how these forces interact. The individual is no more important than the community is, as the particle cannot be more important than the wave.

According to the famous Sangoma, Credo Mutwa (2002, 164) traditional Africans believe that the soul is an integral part of God and that souls came into being when God created himself. Souls are fragments of the universe itself. Traditional Africans also believe that human beings possess twelve senses and that these are within the boundaries of nature, not super-natural. In addition, Mutwa asserts that the African Sangoma possesses vast knowledge but that this has been driven underground with the coming of Christianity. The so-called 'witchdoctors' are nothing more than scientists, psychologists and artists.

Sangomas are clairvoyant diviners and diagnose illness, always attempting to discover the truth within the limitations of tribal laws.

Binet (1970) established behaviour traits from a sample of fifty-six ethnic groups in different part of Africa. The research revealed that the African economic psychology has powerful connections between objects, human beings and the 'supernatural' with the quest for equilibrium among human beings and between humans and the 'supernatural' the dominant guiding principle. Individual self-reliance and self-interest are subject to group loyalty and the need to participate and belong.

African ontology can be explained in terms of *Négritude*. According to Senghor (Sartre 1948) the African presented a concept of the world, that is diametrically opposed to the traditional philosophy of Europe, which is static, objective and a dichotomy. European philosophy is dualistic in that it makes an absolute distinction between body and soul, matter and spirit, founded on separation, opposition, analysis, and conflict. The African, on the other hand, envisages the world beyond the diversity of its forms, as a fundamentally portable reality that seeks synthesis.

The African is sensitive to the external world, to the material and tangible quality of beings and things. Africans consider tangible things merely as signs that have to be interpreted and transcended in order to reach the reality of human beings. This reality is Being and a life force from an ontological point of view. Thus, the whole universe appears as an infinitely small, and at the same time infinitely large, network that emanates from God and ends in God.

There is no such thing as dead matter. Every being and every thing radiates a life force, a sort of wave-particle. Sages, priests, kings, doctors and artists use it to understand the universe. Each of the identifiable life forces of the universe is a network of life forces. For the African, man is composed of matter and spirit, of body and soul and in fact several 'souls.'

Ethnologists praised the unity, the balance and the harmony of African society, which is based both on the community and on the person because it was founded on dialogue and reciprocity. The group had priority over the individual but allowed him to develop as a person. These characteristics of *Négritude* enable black Africa to make its contribution to the interdependent world, including international cooperation.

Finally Sartre characterises *négritude* as the polar opposite of colonial racism in a Hegelian dialectic. In his view, *négritude* was an 'anti-racist racism' (*racisme antiraciste*) necessary for the final goal of racial unity.

4.2.3 UBUNTU

Ubuntu is a metaphor that describes the significance of group solidarity that is central to the survival of African communities through brotherly group care, not individual self-reliance. The practice of collective unity is not new and not unique to Africa and many dispossessed groups in the world subscribe in practice to this concept of Ubuntu. It is a concept of 'brotherhood' and collective unity for survival among the poor in every society. It can also be called 'Umfowetho' in Zulu or a son of the soil, and in Shona it is 'Mwana wevhu' or 'pachedu'. In the Sheno tribe, this would be called 'Unhu' or 'Ubuntu'. (Mbigi & Maree 2005, v).

The solidarity principle of Ubuntu requires conformity and loyalty to the group and failure to comply with this is met with harsh punishment, such as burning of houses and assassination. Black South Africans, for instance, fear to be branded a 'sell-out', being sold out, or victimisation by their own people if they are seen to be co-opted or manipulated by Europeans. (Mbigi & Maree, 1994: 29).

Ubuntu refers to a universal bond of sharing that connects all humanity and serves as the spiritual foundation of many African societies. It is a worldview enshrined in the Zulu maxim 'umuntu ngumuntu ngabantu', i.e. 'a person is a person through other persons'. This traditional African saying articulates respect and compassion for others. It can be interpreted as both a factual description and a rule of conduct. It describes human being as 'being-with-others'. Ubuntu implies deep respect and regard for religious beliefs and practices and underscores the importance of agreement, reconciliation or consensus in African traditional culture. Although it articulates such important values as respect, human dignity and compassion, the Ubuntu desire for consensus also has a potentially negative side in terms of which it demands an oppressive conformity and loyalty to the group. (Ubuntu Education Fund, 2007).

According to Nabudere (2002a, 13) the African renaissance has to be a globally humanizing experience involving whole masses of people under the enlightenment of 'global Ubuntu', which enables people to struggle for humanism and emancipation alongside oppressed humanity. Ubuntu does not seek to dominate and exploit; it can only seeks to liberate the African as a means of humanizing the world.

4.2.4 AFRICAN EPISTEMOLOGY

Modern African born scholars such as Diop have pointed out the difference in intellectual approach of the African and European researcher, which may lead to misunderstandings in the interpretation of facts. The approach of the European scholar to African data is analytical, viewing things from the outside, with reluctance to synthesise. The African scholar distrusts this and sees it as the fragmentation of the collective historical African consciousness into insignificant facts. (Cook 1974, 275).

African epistemology starts with the recognition that all knowledge is valid within its own cultural environment and that such knowledge can become the subject of dialogue for self-disclosure and cross-cultural validation. In the process of dialogue, conditions must be created for communication and recognition of the contribution of each entity. This hermeneutic approach requires an African contribution that concurs with the needs of self-emancipation, while drawing on cultural heritage, taking into account new developments. Therefore tools must be developed to draw on the deeply embedded indigenous knowledge systems of Africa, including its practical knowledge, and build on it technical knowledge that can be of value in a global world. The African knowledge base must enrich other knowledge bases, while also learning from others. Knowledge must be pooled and made accessible to all users. A methodology that can reveal the inner structure of African knowledge, which determines the framework within which construction of rules and techniques for discovering meanings of a particular community has to be developed, within the framework of its symbolic disclosure. (Nabudere 2002b).

4.2.5 EVALUATION

The most important characteristics of African knowledge is the search for equilibrate transcendent connection among dimensions containing objects, human beings and the

universe, as well as the quest for an equal position in the universe in relation to external objects or beings. The principle of an interconnected whole, with entities always interacting with one another, seeking balance, is central to the study of knowledge management in Africa. Especially the characteristic of seeking general correlations among objects and synthesis and the formation of alliances and groups as a matter of custom, is directly applicable to the production of new knowledge as an output of the system.

The oneness of the soul with the universe, the claim of sensing the environment through more than just the conventional senses and the knowledge access of the Diviner are important assertions for this study. Articulated as the concept of Ubuntu (a term with the same meaning in different languages), these characteristics forms the normative foundation of traditional African society. Ubuntu dominates power relationships in communities and allows for the promotion of peace and the resolution of conflict on society in an indigenous way.

The researcher had to find out how Ubuntu could serve as a normative knowledge foundation in interaction with trans-national organisations in a new knowledge economy (see Chapter 3). The question is how the practices of Ubuntu could be applied to those involved in the community (like multinational business), but who are not seen as part of the community and who contributed and still is suspected of contributing to the violation of human rights and exploitation. How can the African community and trans-national business collectively attain a synthesis of knowledge that can contribute to the convergence of corporate responsibility and the expectations of African society? Do traditional practices serve as a constraint to sharing, consensus, trust and finding of synergy between African society and trans-national business? If so, can a methodology be developed to adopt or use value systems like Ubuntu in ventures like conflict resolution, where both African society and the trans-national organisation are involved?

Therefore, a specific epistemology is needed for research that would recognise the validity of KM practices in the African culture that can be applied in a multi-cultural environment. Such practices may not only be of value to attain the end of the trans-national organisation, but mostly to be used by African society for self-emancipation, self-disclosure and the revival of Africa in general.

4.3 RELIGION

According to Nabudere (2002b, 13) for centuries the Africans have had a this vision of a spiritual continuum within which the dead and the living, natural objects, spirits, divinities, the individual, clan and tribe, animals, plants, minerals and humans form an unbroken hierarchical unit of spiritual forces. Human rights in the context of human relationships teach that the human self is not only an individual but also an extended universal self, actively participating in all parts of the human totality. Human rights are perceived as universal. In African history, human rights cannot be understood apart from the rights of all of creation, including even the rights of the dead, nor can the dignity of the person be understood separately from the dignity of the whole of creation.

4.3.1 THE RELIGION OF CENTRAL AFRICA

Horton (1993, 281-287) explains African knowledge in religious context, referring to the monographs of Skorupski (1976) on the Nuer and Dinka religion of Central Africa, and identifies three areas in the religious discourse of these groups:

- Unity-in-multiplicity' refers to the mystery posed by a multiplicity of lesser spirits that are thought of as a single supreme being.
- Multi-presence' refers to an intra-level mystery involving attempts to characterise the spiritual beings themselves that are thought of as beyond the confines of space and time, being in many places at the same time or omnipresent. The Nuer and Dinka do not think of their Spirits as having a spatial location; they can be present in many places at a given time. The most impressive and significant phenomena known to people in a specific location (e.g. rain, thunder and lightning) imply the presence of Spirits.
- The third 'mystery' is 'manifestations and materialisations' that involves entities or events identified with God, although God may also be distinct from such events and the events are not necessarily identified with each other. An inter-level 'mystery' asserts that although observable phenomena are thought of as distinct in their attributes from the Supreme Being, which created and sustains them, they are also identifiable with the Being. Thus rain, for instance, has attributes and

heaviness, which Spirit lacks, and Spirit has attributes such as personality, which rain lacks; yet is seen as Spirit.

Nabudere (2002b) asserts that in African society, one is always a member of a community that comprises God, the living and the dead, and the entire cosmos. On the purely human level, the custom has always been that important decisions are taken by the family sitting around the hearth, consulting and arriving at consensus after taking into account the words of wisdom from Ruhanga (God). Hence, the ultimate court of appeal for justice is always God, to whom appeals for justice are addressed regarding all aspects of life. A worldview is the dual understanding of human rights concerning 'obugabe bw'obuntu' or 'bw'obuhangwa' in Runyoro/Rutooro, and 'ely'obwebange' or 'ely'obuntu' in Luganda. African ancestors always had, 'eddembe' human rights in relation to the rights of the whole of creation, and human rights in the context of human relationships and passed these on.

Therefore, Nabudere says, traditional African practices and beliefs in and around the Great Lakes contain many values that protect and promote human rights and those of all of creation. According to the African eco-worldview, people claim their identity as deeply rooted in the land as the life and identity of people to a point where the Baganda and some of their neighbours call a human being, 'omutaka'. The root word 'taka' means 'soil': the 'omutaka' is the person, son or daughter of the soil. People live and grow up with nature, they feel one with it and closeness with nature and the whole of creation is central to their understanding of their existence. The meaning of being human can only be found in relation to the rest of creation.

African traditions speak of this interrelatedness, including the 'Master Creator' or God (the number one 'Mutaka'), human beings and the world, characterised by mutual respect and interdependence. In the Ugandan society are the Baganda people with their 52 'bikka', the Banyoro-Batoro with their 83 'enganda', and the Luo of Uganda and Kenya with their 99 blood-lineages claiming affinity with some totem. (Aruhanga-Akiiki 2000). The Baganda believe in the culture of 'obuntu bulamu,' literarily meaning 'good humanness'. It reflects a concern for the whole of humanity and recognizes the contribution of all humanity to a common human virtue.

According to Vansina (1966, 30-33) the traditional religion of all people in the savannah area south of the Central African rain forest is similar. A creator or God is recognised and is worshipped collectively and in private. Nature spirits are prominent north of the Congo River and lower Kasai regions. Ancestor worship is prominent and belief in witchcraft and sorcery is universal, as is belief in the magical power of some 'doctored' objects. Rituals seem to be similar through the whole area. Religious specialist includes medicine men and diviners.

Vansina refers to the traditional value system of the Tio society (in the current vicinity north of Brazzaville in the Republic of the Congo and Kinshasa in the DRC, which is marked by strife, individualism, ambition, political competition, economic entrepreneurship and bargaining. Behaviour linked to ambition, forceful aspirations and lack of mercy was considered evil. However, people believed that but did not live up to it. When 'evil' was done, it was assigned to the rigid causality of witchcraft, doing away with personal responsibility or chance. Anything out of custom was an accident but caused happiness, even if it was morally wrong. An ideal was to parade oneself dressed up with followers, have praises sung, and be laden with objects and treated with awe. The other option was to be lost in the crowd. (Vansina 1973, 240-241).

4.3.2 THE RELIGION OF WEST AFRICA

Okere (2004, 10-11) argues that ancestral religion inspires African civilisation with moral values, material modes, attuned to nature, with the emphasis on the uprightness of the individual and society. Moreover, African religion is not only the metaphysical dealing with objective reality, but is also a knowledge framework for understanding reality and the world. African knowledge is more than just common sense. It can also be highly specialised knowledge, e.g. the herbalist who has expert knowledge based on experience. The African ancestors observed their natural environment and turned empirical data into moral principles, which are now applied in the battle for survival. However, it was also a religion of fear, ridiculous taboos and devoutness, as well as conformist, arresting initiative and killing progress.

According to Okere, today, three religions contribute to African thinking and continue to determine the spiritual destiny of Africans: African ancestral religion, Islam and Christianity. It affects one another and African society. Islam has changed the intellectual framework of

North Africa, turning the 'intellectual bastion of Christianity' into a Muslim empire. It developed a great world civilisation that has reached great heights of culture and remains vibrant. However, the theocratic philosophy and intolerance of Islam make it a politically dangerous religion in West Africa. Christianity, which originated from Europe, where the Christian faith and paganism merged, brought both blessings and woes to Africa. Although Christianity is regarded by some as an 'intruding bully' that wounded ancestral religion, only the Christian church speaks out on ethics and public goals because its structures and organisation are the strongest.

Unfortunately, traditional customs have been challenged by the influence of new African leaders who adopted Christianity and Islam as basic religions. Traditional culture has been disrupted through polarisation of values. Urban Africans are now living a lifestyle of a workfor-pay relationship in the national economy and they continue to fight against oppression by national leaders. Despite the adoption of this new way of life, Africans attempted to hold on to their traditional background as the only means of relating to their ethnicity. (Wallerstein 1972: 410)

The merging of religions in Africa is possibly described best by Duruji (2003, 73) when he depicts Igboland as a 'Tower of Babel' of religious belief systems and practices. Showing that Igbo society is predominantly Christian, he points out that Christianity does not claim a monopoly of the Word of God. In Igbo ancestral religion, there is abundant evidence of the inspiration of the Holy Spirit. Proverbs, folklore and anecdote are used in Christian church sermons and symbolised by traditional Igbo artefacts. There is a meeting point and mixture of Christian doctrines and Igbo Ancestral Religion.

Religious pluralism is well explained by Omeire (2003, 254-265). He points out that Muslims, Christians and traditional religionists are found living together as neighbours within extended families and in Nigeria, actively collaborating in governments and even nation building. Peaceful coexistence and social reengineering is encouraged in the context of religious pluralism, which is seen as a middle ground between exclusivism and inclusivism (also described as syncretism). Exclusivists teach that one's own religion is the only true religion and that all others are diabolical and misleading. Syncretism teaches that all major religions are equal in value, representing different paths of reaching God. Pluralism rules out religious controversy and violence and pleads for dialogue, togetherness,

understanding and tolerance. However, in Nigeria coexisting religions are in a state of conflict because of fundamental incompatibilities. Peaceful co-existence and efforts at social re-engineering is received negatively in Nigeria and pluralism is not recognised.

4.3.3 EVALUATION

Three important issues are emphasised here. Firstly, religion in Africa, despite the negative aspect of intrusion on African society, brought important intellectual capital to Africa. Furthermore, religious practices of Africa are not always in conflict with each other but have started to merge in practice. Thirdly, traditional religion survived the coming of religion from outside the continent and Africans still value the practices inherent to the traditional African customs, including their knowledge systems. The intermingling of religious practice, which gives African religion a unique character, the ideal of pluralism and the good intentions of syncretism have not manifested everywhere.

The existence of exclusivist thinking in African society, and its re-emergence where it lies submerged is a cause of conflict that must be identified at an early stage through the management of knowledge through interaction between the trans-national organisation and the community involved. Furthermore, paradoxes occur in traditional religion with a strong resemblance to scientific discourse. The African religious thinker, like his scientist counterpart, attempts to explain relationships through concepts of identity and causality derived from everyday discourse, constrained by everyday ideas.

Although many mysteries (Skorupski calls them 'puzzles') are involved, the relationship of religious beliefs with actual events removes the mysterious aspects if the observer is conscious of that relationship. It is for the observer and analyst to identify the meaningful events that underlie a specific knowledge claim. For the researcher the challenge was in investigating how the business analyst can improve understanding of African religious practice and how religion manifests within African as a knowledge claim, and ultimately, how it can be managed.

The manifestation of philosophical assertions of African knowledge in the Great Lakes region presents a perfect opportunity for fieldwork. The situation and epistemology of the Great

Lakes region allows for in-depth field study on aspects such as conflict, justice and human rights, including the religious knowledge claims related to these values. Especially in relation to conflict, an early pattern of violent strife and competition is detected. To understand the knowledge perspectives, which formed part of this conflict pattern, would enhance understanding of how to manage knowledge in the present conflict situation. Especially with regard to efforts at addressing a history of human rights abuses and bringing justice to the communities involved, the role of religion as a binding or divisive factor must be considered.

4.4 IDEOLOGY

A further knowledge framework that manifested itself in the epistemes of Africa is ideology. While advocating unique concepts such as Negritude, anti-imperialism and Uhuru, other ideas originated in European ideologies such as Marxism, Leninism, humanism and socialism.

4.4.1 CAPITALISM AND MARXISM

Senghor's *Négritude* (which developed in the 1920s and 1930s from structural explanation) is an ideological reaction against French colonialism and in defence of African culture. It has deeply influenced the strengthening of African identity in the French-speaking black world. Senghor emphasised that everything that is imported must be judged for its applicability and reality to Africa. He rejected 'pre-fabricated models' referring to capitalism and communism. He asserted that a system of free enterprise could not function in a country that is not strong in capital and where people are not familiar with the working of the system. He also rejected the communist model and wrote that the 'purely materialistic and deterministic postulate' of communism clashes with his view that people can change their environment and rejected the communist proposition of class conflict. In his investigation into other models, he found that Israel and China could inspire Africa because they had been able to adapt socialism to the spirit of their native soil. He encouraged the use of other socialist experiments to promote socialism in Africa. In Senegal it led to decisive intervention to implement the principles of socialism, especially in the rural areas. (Minogue & Molloy 1974, 232-234).

For a short while during the 20th century, Marxism had a profound influence on the thinking of especially the intellectual African. An example of a Marxist-influenced viewpoint was that of Patrice Lumumba, a former prime minister of the Democratic Republic of the Congo (DRC). He was in favour of a unitary Congo and against division of the country along tribal or regional lines. Like many other African leaders, he supported pan-Africanism and the liberation of colonial territories. He proclaimed his regime one of 'positive neutralism,' which he defined as a return to African values and rejection of any imported ideology, including that of the Soviet Union. (MacGaffey, 1981).

Frantz Fanon, who although not an orthodox Marxist but influenced by this ideology, was known for his theories on violence and especially the destruction of colonialism through violence. Fanon alleged that aggressive feelings originated in the traditional community. (Blackey 1974, 205-206). He believed that foreign values had to be washed out, which will make black people new. He cited Algeria as an example and claimed that the whites and the Algerians despised each other and that no middle ground could be found. Fanon concluded that the farmers, intellectuals, unemployed and poor were on the periphery of society. The radical among them moved to the rural areas to instigate and organise guerrilla warfare. In this regard Fanon adapted the orthodox Marxist view to developing countries. (Grohs 1968, 548-555).

4.4.2 AFRICAN UNITY

Nkrumah of Ghana preached the ideology of a 'New Africa', independent and free from imperialism, organised on a continental scale, founded on the concept of one united Africa, drawing its strength from modern science and technology and from the traditional African belief that the development of each is the condition for development of all. Through all his work, he called on the African tradition of democracy and centrality where consensus is found under command of one authority, the chief. (MacRae 1966, 536).

Nkrumah observed that with true independence regained, a new harmony needs to be forged that will allow for the combined presence of traditional Africa, Islamic Africa and Euro-Christian Africa, so that this presence is in tune with the original humanistic principles underlying a new African society. (Okere 2002, 8).

Influenced by Leninist theory on neo-colonialism Nkrumah asserted that all colonial governments in Africa and elsewhere were in a struggle for raw materials. The colonies had become a source of raw materials, cheap labour and a dumping ground for surplus goods. He also referred to neo-colonialism when he said the colonial powers were trying to safeguard their positions in Africa by granting political independence while dominating economic life. (Minogue & Molloy 1974, 213).

The philosophy of Julius Nyerere brought a decisive change in existing values and practices in Africa. The most important aspects of his views relate to freedom and development, education to attain independence, socialism, black democracy and African unity. Nyerere saw education as a determinant strategy to change the value system in Tanzania from a nation of individual peasant producers who were gradually adopting the incentives and ethics of a capitalist system to a nation of Ujaama villages where people cooperated in small groups and where small groups cooperated in joint enterprise. He warned about the centre losing contact with the periphery and promoted the idea of leaving planning and administration to district organisations with as little control from the centre as possible. (Minogue & Molloy 1974, 75-101).

From the point of view of what Mafeje (1992) calls 'the sociology of knowledge' a random sampling of black African literature from the late 1950s and early 1960s shows a pre-occupation with traditional African values and their threatened disintegration under Euro-Christian values, backed by an encompassing colonial administration. After many countries became independent, there was an increasing concern about the degradation of African ethic due to urbanisation and the unchecked ruling elite.

4.4.3 EVALUATION

How the thinking of Senghor on African socialism influenced thinking on development remains to be investigated. If a researcher should enquire about the manifestation of African socialism in African society today a clear answer will probably only be obtained from scholars, politicians and other intellectuals. However, the method behind socialism is probably noticeable in structures in a subtle way as leftovers of reconstruction programmes in the previous century. It is for the researcher to establish if unique socialist thinking is still part of the episteme under investigation.

From the literature on ideology in Africa, it can be inferred that ideology still influences the way Africa sees the world. In many societies the principles by which people are educated, consciousness about power relationships, the periphery as source of violent conflict, the imbalances in urban and rural development, the preference for central decision-making, the violent destruction of political opposition and the philosophy of African unity are all reinforced through ideological thinking. Especially the ideology of liberation within the context of socialism became embedded among leaders and intellectuals in a subtle way, without people always clinging to it as an ideology in the same way religion is practised.

Radical thinking on how people who are perceived not to be Africans should be treated is still found in most communities in Africa. However, these emotions are not related to Marxist thought or even Fanon, but are probably emotions situated in the subconscious based on a very negative experience of colonialism and domination. Exponents like Fanon only articulated these feelings within an ideological framework, which like the socialist paradigm became vague, but the norms articulated by the paradigm are still embedded in the minds of people. More positive, however, is the thinking of Nkrumah, especially the influence of his thinking on the African Renaissance vision. His pragmatic and visionary thinking influenced the thinking of many influential politicians, civil servants, community leaders and scholars.

The philosophy of Nyerere had a strong influence not only on his own country, Tanzania, but also on many African leaders today who encountered his revolutionary teachings within the context of the liberation of Africa. Although initially unclear about African unity, later in his life he became a strong exponent of continental cooperation for the revival and emancipation of Africa.

Researchers and scholars who investigate knowledge frameworks in Africa cannot ignore ideological thinking because it has become part of the African epistemology and philosophy, especially about the emancipation needs of the African. The research challenge will always be to identify if ideological thinking on, for example, socialism is an important knowledge claim within the specific sub-system, especially because it is embedded in the minds of people. Furthermore, the influence of persistent ideological thinking on cooperation and interaction in a global knowledge economy and the trans-national organisations had to be

researched, especially on how it can be reconciled with other ideological ideas like African Unity, the African Renaissance vision and capitalism in the new knowledge economy.

4.5 SCIENCE AND AFRICAN KNOWLEDGE

Modern scholars regard knowledge in Africa as indoctrination resulting in Africans believing that there is only one way of thinking is the Western way. (Ntuli 2002, 54). One view is that Western scientific knowledge building is ruled by a group of people united by erected boundaries and oppositional thinking, compartmentalising societies and creating an inferior or incompetent "Other". (Crossman & Devish 2002, 26).

4.5.1 TRADITIONAL KNOWLEDGE AND SCIENCE

Horton, (1998, 181-192) discusses African traditional thought and Western science and spells out the significant differences between traditional and scientific thinking. He asserts that an African cosmology tends towards proliferation and the spirits in the African cosmology are countless. Referring to research he did among the Kalabari of the Niger Delta, he showed that everything can be interpreted in terms of a scheme which postulates ancestors, heroes and water-spirits. Like unseen atoms, molecules and waves, the gods serve the intellectual function of introducing unity into diversity, simplicity into complexity and order into disorder, removing mystical thinking.

According to Horton, anthropologists cannot identify this because they move in the common sense world of Western culture and are not familiar with all theoretical worlds. However, reference to theoretical entities is used to link events in the visible tangible world to their experience in the same world, as the both the traditional African thinker and nuclear physicist do. Traditional religious thought is no less interested in the natural causes of things than the theoretical thought of the sciences. The intellectual function of supernatural beings is the extension of the vision of natural causes. The spirits provide the causal context and basis of the theoretical scheme covering the frame of reference of the own community and environment in the form of individual guardian spirits and group spirits, the same as in some European thinking.

Horton asserts that the Supreme Being provides the means of setting an event in a holistic context. The different levels of thinking are the same as theories used in explanation and lose their mystical aura. Traditional religious theory not only postulates causal connections based on experience but some of the connections are real. In Africa, the relation between common sense and theory is the same as in Europe, but there are certain circumstances that can only be coped with in terms of a wider causal vision than common sense provides. For instance, most traditional African cultures have adopted a personal idiom as a basis to understand the world, including the supposition that people strengthen social groups.

Horton continues to say that in Africa, the human scene is the locus of order, predictability and regularity in contrast with changing industrial societies where people have become more comfortable with things. Consequently, members who disturb the unity of the group are spoilers and must be punished. Phenomena such as disease are interpreted in this context. If not explained by common sense, disease is related to disturbances in a person's social life, using ideas about spiritual agencies, jumping from common sense to mystical thinking, equivalent to the jump from common sense to theory.

4.5.2 AFRO-CENTRICITY

Asante & Abbary (1996, 6-7) proposed Afrocentricity and defines it as the belief in the centrality of Africans in post-modern history, emphasising that its history, mythology, creative motives and ethos exemplify the collective will of the African. It is a liberating theology and a science that seeks to change the way Africans see themselves in history. European 'particularism', which Europeans see as universal, is rejected.

Diop (1991, 6) calls for the creation of an African Egyptology that will move away from theories presenting only hypothetical influences. He calls for new human sciences and research which pointing out the contribution of Africa to science and philosophy, which will produce a new philosophy that reconciles humankind. He argues that the African philosophical universe had achieved consciousness of itself and separated myth from thought long before the Greeks did. He proposes 'a return to Egypt', the cradle of classical philosophy, which represents the common denominator of thought. Diop proposes that a scientific way of tracing African philosophy is to find the facts and chronology of Egyptian origin and historical connections.

Ivan van Sertema (representing a popular view among the African Diaspora) discusses what he calls 'the lost sciences of Africa', referring to the discovery of making steel, astronomical observations, mathematical systems and architectural constructions of 'great ingenuity and durability', agriculture and cattle rearing, navigation on inland waterways and the open sea, medicine and writing systems. He suggests that Africans need to turn their eyes away from 'the periphery of the primitive to the dynamic source of genius in the heartland of the African world'.

4.5.3 AFROKOLOGY

Nabudere (2006a, 20) proposes the science of Afrokology based on the cosmogonies of 'Thothology' as a philosophy of knowledge and wisdom. Afrokology is a new attempt by African scholars to define new cosmological, philosophical and epistemological approaches to access African knowledge and wisdom. Afrokology is is inspired by ideas originally produced from the 'Cradle of Humankind' in Africa and emanates from the source of the universal system of knowledge. Afrokology is also logos (the ordering principle of the universe) from which consciousness, humanity and language flowed. It is scientific and unique because it is based on an all-embracing philosophy of humankind originating in Egypt and updated by the lived experiences of humankind. Although originally based on myth, Afrokology developed into a philosophy conscious of itself and its own existence as thought. Afrokology applies the epistemology of *Thothism* (the African Egyptian God of Knowledge) to accommodate the reality of an African worldview that involves the relation between the temporal and spiritual world (also see 4.2.1).

Nabudere proposes therefore that methodology to access the knowledge or wisdom of Africa has to be hermeneutical (understand how Africans see the world) because it is not only scientific reason that is involved. The predominance of 'orality' and 'verbality' requires inter-disciplinarity, as one of the mechanisms to fight the rigidity of Western scientific method, but it is not enough.

4.5.4 EVALUATION

Literature on the scientific character of African knowledge shows similarity between traditional African thinking and scientific practice and calls for scientific achievements that originated from Africa to be recognised. Several scientific concepts were drawn of African experience through human contact. The proposed centrality of Egypt implies that original African knowledge originated along the Nile River and adjacent populated areas as far as the Ethiopian highlands and possibly the Great Lakes of Central Africa.

If the history of interaction with Egypt is considered it is safe to infer that Egypt played an important role as source of scientific knowledge in Africa and certain practices, for example knowledge in the field of agriculture and astronomy. The theory of Afrokology successfully explains the approach to access knowledge in Africa, as well as the scope of scientific knowledge in Africa that extends beyond the observable world. If the state of scientific knowledge in Africa is studied, it is found that knowledge in Africa is original, scientific and has contributed significantly to scientific practices in the world. Furthermore, knowledge in African contains a normative element, which is scientifically founded, but explained in the idiom of the specific community, which is mostly spiritual but also ideologically based. Moreover, it is inferred there is a need for a synthesis of the traditional African worldview and modern scientific knowledge into a holistic understanding as part of the indigenous knowledge of Africa.

For the researcher it means a return to discourse on where scientific knowledge originated in order to find original African insights into issues such as conflict resolution, which promises to be more reliable than insights developed outside Africa, which may not be fully applicable to the contemporary challenges of Africa. However, the researcher is also aware of the importance of identifying the specific idiom in which the specific cultures under investigation views the world. Explanations beyond the realm of the observable and the unseen, which are accepted not to be in 'mystic' realm but based on observable phenomena, can only be offered if the cultural idiom, indigenous language and oral tradition are fully understood.

4.6 KNOWLEDGE IN AFRICA

The holistic grounding of hermeneutics in African philosophy is expressed in the African-Egyptian god Hermes, who represented an internal (spiritual-metaphysical) dimension and an external 'ontological' dimension of African 'being.' Hermes was able to transmit messages and knowledge from the gods to humans, while providing the hermeneutic openness to other influences. (Nabudere 2002b, 14).

4.6.1 THE HOLISTIC CHARACTER OF IKS

Mqotsi (2002, 171) warns that the emerging African elite must resist the temptation to develop an Afrocentric view of the universe and to slide into voodoo science. Africans must claim residence in the mainstream of historic progress of humankind to a higher level of thought, science and technological attainment. Owomeyela (1996) supports this view in cautions against a blanket concept of 'Africanity' that denies the diversity of 'Africanities' in a world of hybrid culture identities. He warns of an unbridled uncritical allegiance to the African past and sees it as an obstacle to recognising and acknowledging structural and behavioural adjustments necessary for modern life.

Onjoro and Purcell (2003, 23-30) call for parity and suggest a methodology for the integration of 'multiple socially unequal' knowledge in planned change and development. They suggest a procedural model for knowledge integration, focusing on knowledge applied in the context of material and cultural inequality. The nature of legitimate knowledge and the unequal power relations within which multiple knowledge systems functions are explored. The authors assert that proponents of scientific indigenous knowledge can ignore neither cultural substance nor the epistemological basis of each other's knowledge.

As a possible option, Onjoro and Purcell propose a theoretical model of knowledge integration, allowing for a project involving the equitable integration of theoretical and cultural-relative belief systems to be integrated, with the community as agents to enable collective decision-making that is culturally relevant and considers ethnic principles. The model goes further to make provision for the resolving of organisational and procedural issues with regard to the involvement of indigenous people, the finding of common ground, a cognitive basis for translating knowledge, the resolving of differences and the final exhibition of baseline knowledge for decision-making.

Nwaka (2003, 66) asserts that national planners and the international development community must provide an enabling and supporting environment for indigenous knowledge to reach its potential. Authorities should create the appropriate legal and policy framework for decentralised partnership with civil society. There must be a policy shift from a top-down centralised to a bottom-up grassroots approach.

According to Adam and Bonemra (1999, 343), a pattern of development must be followed to recognise the merits and limitations of local knowledge as well as global science and explore the interface between the two. Attaining this in Africa would require awareness of the opportunities, the emergence of a knowledge society and a reduction of the gap between the elite and 'under-served' population, building a scientific knowledge base.

Fatowna and Picket (2002, 260) describe the 'coming together of world views' and visualise a new synthesis incorporating existing diversity where the indigenous and non-indigenous move to a culture of partnership on an equal footing, based on shared understanding, values and cooperative action on trans-national and other levels. According to them, knowledge paradigms of the future are developing, reaching out to these on the periphery, moving towards a new synthesis. Knowledge systems and different ways of knowing are complementary, and considered together, a fuller reality can be seen. Indigenous systems are open to each other: 'old world Wisdom of the West' opens to other cultures, reinforcing and enriching each other. A larger scheme of things includes the integration of knowledge systems and a balance between Western rationality and scientific method. There is also double-sided tension between traditional religious knowledge systems (indigenous and non-indigenous) and eclectic esoteric 'new age' spiritualities. A path in between is being navigated.

Houtondji (2002, 36-37) reiterates that people must capitalise on and master existing knowledge, indigenous or not, and develop new knowledge as a process of creativity, applying findings in a systematic and responsible way to improve their quality of life. The integration of the traditional into the modern, in a way that allows for the development of new forms of rationality, is encouraged.

Edward Boateng (1999, 389) suggests that Africa's present leadership should embrace the ever-expanding global information revolution in the interest of development. African

industry and policy-making institutions need to start using the optic fibre information 'highway' as soon as possible, removing artificial regulatory barriers, and improving information infrastructure. He proposes that a major objective must be to create a uniform production and dissemination infrastructure, which will primarily aim to resolve the widespread recurrence of tribal conflicts throughout Africa and produce sufficient conflict-resolving information. An 'African originated electronic communication revolution' will allow us to nurture and sustain an environment in which Africans can harness human and other natural resources to their full potential. There is a need to establish and manage African information-dissemination structures, for example for the credible outflow of information on the state of African economies, including a reliable Internet network.

The scientific community must transform culture to build linkages between excellence in formal scientific systems and innovation in informal knowledge systems. The idea of an inclusive network to link various stakeholders through information technology is supported. The creation of an integrated and holistic knowledge framework for social development is urgent. (Odora-Hoppers 2002, 8).

Information and communication technologies present opportunities and challenges for the development of science and technology in Africa and can be used to solve local problems. For Africa to undergo a true rebirth there needs to be a strategic focus on leveraging accessible technologies. Information technology offers an unparalleled opportunity for the regeneration of the African economy. (Magau & Mashupye 1990, 349).

4.6.2 IKS IN THE GREAT LAKES REGION

In the Great Lakes region, from the 16th century to the 18th century, dynamic input from Europe reached a level of pressure when commercial organisation and the impact of external trade manifested themselves in all spheres of life. As in the case of most societies in Africa, the Tio lost their autonomy and closed character so that their economic structures underwent radical change. Similar research among the Kuba (Kasai region) led to similar results: political processes have changed beyond recognition since pre-colonial times and the impact of colonial activities on structures were significant, but appeared to be less and of different nature on religious and ideological practices. (Vansina 1973, 495-497).

From about 1870, when European exploration and exploitation took place the Congo area was controlled as private territory by Leopold II of Belgium, under whose rule the Congo faced brutal and greedy colonisation. From 1908, he formally relinquished personal control of the 'Congo Free State' and the renamed 'Belgian Congo' came under the administration of the Belgian parliament, a system which lasted until independence was granted in 1960. The Belgian administration was paternalistic colonialist and the educational system was dominated by the Roman Catholic Church and Protestant churches and the curricula reflected Christian and Western values. By 1948 99.6% of educational facilities were controlled by Christian missions. There was little regard for traditional culture and beliefs. Capitalism revolutionised the traditional economy of the Congo and revolutionised Congolese society. Production patterns did not coincide with traditional, seasonal patterns of agricultural production. Tribal states or empires organised along precarious, unwritten cultural traditions also shifted to a division of labour based on legal protection of land and labour, commodities to be bought, sold or traded. When Mobutu seized power in 1965, he inherited 'chaos, disorder, negligence, and incompetence' and turned to political reconstruction and consolidation. By 1976, however, this effort paved the way for the resurrection of a 'bula matari' ('he who breaks rocks') system of repression and brutality. (Gondola, 2002). The entry of France into the Congo after independence was intended to strengthen the French culture due to the French language had by that time been embedded in the new states (Nabudere 2004, 4).

During this time, nothing prevented the Bakongo from meeting their religious needs through participation in the approved bureaucratic churches. They were all nominal Christians in one or other way and the profession of faith was profoundly important. Nevertheless, a type of Christianity organised and practiced according to the cosmology of bureaucratic capitalism addressed only one part of their lives and their view of the world. (Bimwenyi, 1981). Most Zairians went to diviners to explain the sources of the witchcraft they suspected to be the causes of the trouble and to healers for remedies while at the same time they might attend both the church or go to the hospital. (MacGaffey 1986, 248).

Vansina (2004, 196-203) explains that collective memory influences present-day perceptions and sometimes guides present behaviour. Recollections in the shape of traditions that survive carry a meaning that is related to themes of present-day interest. Collective memory consists of a set of recollections and speculations, acts on the present, and finds expression in books,

media and the spoken word. He states that 'lessons' learned from the past can be ambiguous, changing meaning from the past to the present.

Similar to the case of the Congo, Vansina (2004, 196-203) refers to the history of Rwanda since the 19th century and asserts that it is still true in the present that that any rule that is based on the right of the strongest leads to perpetual instability. Today the 'technology of coercion' is added. Vansina continues to point out some value aspects of Rwandan society and refers to the preponderance of high nobility, the effects of the dynamics of internecine struggles about territorial expansion and internal development, the tendency to resist delegation of power, excluding social groups from participating in government and eliminating competitors, and the extent to which anomie has eroded Rwandan society. Important changes occurred during the last century, but the overall cultural conditions in the country are not so different that it renders experience invalid. Currently power is concentrated in a small group of people. Rwandan thinkers must draw on foreign experience in order to elaborate a system of government that would avoid an excessive concentration of power and alienation of people.

Concerning Uganda, the advent of foreign religions and colonialism in the nineteenth and early part of the 20th century led to the traditional cultures of Ugandan society being transformed. People imitated Europeans in all manners. Islamic and Christian religious practices became a way of life. Despite this high degree of transformation into a new culture, some Ugandan societies retained significant elements of their culture. (Mbaga & Nzita 1998, 166).

According to Lule (1995) the values of democracy, participation, respect for human rights, mutuality and cooperation with others all influence the nature and functioning of the institution of traditional leaders in the contemporary society of Uganda. Traditional institutions, systems and values managed to outlive the destructiveness of the colonial and post-colonial periods, and reconciled with the modern principles of democracy, human dignity, human rights and development. They give a specific identity to Uganda and ensure that the country is not totally dependent on foreign concepts, values, and institutions. The contribution of Uganda to the world society would be best when it is based on local values and aspirations.

In Uganda, the constitution accepted in 1966, abolished the kings and the kingdoms. Upon coming to power in 1986, Yoweri Musereni restored the title of traditional leaders

4.6.3 EVALUATION

Literature on African knowledge shows that that African knowledge should not be seen as divorced from a broader global scientific effort to enhance the knowledge of humankind or placed into one restrictive discipline. Several African scholars promote the idea of merging global knowledge, scientific or normative, with knowledge in Africa into a synthesised whole. The nature of a holistic and trans-disciplinary approach to knowledge creation is expressed, placing Africa as an equal partner with its external environment in search for equilibrium. A holistic knowledge system, which includes not only formal structures but also the informal to form an all-encompassing reinforcing interaction among entities, is proposed.

Interaction among entities in African society brings the holistic KM into the practical sphere by suggesting specific actions needed to improve the quality of knowledge for Africa. Firstly, the formal environment calls for policy frameworks and strategies as enablers for knowledge systems. Furthermore, also in the formal milieu, scholars emphasise the need for partnerships and flow of knowledge among entities, citing interaction between civil society and government structures as a specific example.

Information and communication technology (ICT) is presented as an important enabler of knowledge creation and transfer among entities in Africa to create knowledge that is available for development and transformation of the societies under investigation. An Africa-specific technological-based infrastructure to manage indigenous knowledge in a secure way is proposed. The infrastructure should connect to a wider global network to render the knowledge base for decision-making as completely as possible. However, although ICT is a vital element for successful networking and interconnectivity for the flow of information, the management of an overload of electronic information and the sharing of knowledge, knowledge sharing is not synonymous with ICT.

It is found that Africa can deliver a knowledge output that is supportive of an African and global effort to stabilise, secure and develop, while preserving unique value systems. The holistic nature of knowledge systems and the relative impossibility of isolation from other sub-systems have been identified. Despite a sub-system enjoying unique norms and values akin to a system, it constantly produces new knowledge, and knowledge inputs enter it from other epistemes situated in a dynamic global environment. This is also the case with knowledge systems in Africa. Maybe what renders Africa unique (although there are also similar cases elsewhere in the world) is the controlling and demanding nature, or fear, of the technological driven dominance of knowledge from especially the USA and Europe, especially on both the epistemological and philosophical levels. Therefore, several 'gaps' or boundaries have to be crossed in the search for such a holistic synergy.

The need for transcending boundaries is found on three levels. On the first level, one finds the interface between global knowledge and African knowledge. On the second level, the need for interface between the elite and the underdeveloped on the periphery is identified. On the third level, the challenge is to understand the spiritual nature of African knowledge, which is believed to be empirically/scientific founded and must be accessed hermeneutically.

The holistic nature of African knowledge prompted the researcher to investigate how specific communities and businesses succeeds or fail to integrate knowledge and learn from one another as part of a global network system. The researcher has to evaluate, not only how a collective middle ground and synthesis of knowledge takes place and how overlapping values and intellectual capital serves as premises for a synergy of knowledge, but also how knowledge is used by the trans-national organisation and African society to make congruent decisions and take synergistic actions to meet the expectations of all. The claim of the important role of ICT to enable holistic knowledge also calls for detailed research.

A historic pattern of violent instability in the Great Lakes region and pressures exerted by colonial and neo-colonial economic exploitation and culture established a collective memory that form the contemporary knowledge foundation of the region. Especially the Congo is an example of a knowledge system that displays the characteristics of any system that is open to inputs from other systems, allowed in pressures and demands, producing outputs in a continuous search for equilibrium while under immense pressure from negative forces from outside the system and destructive forces within the system.

A history of trade and imbalanced interaction in which dynamic global system, together with a culture of oppressive and brutal action against competing forces within the system, overwhelmed the traditional systems of the Congo (despite submerged remnants of the system) and rendered the Congo what it is today: a sub-system dependent on global interaction. African knowledge and Western knowledge did not merge in the Congo. African knowledge was overwhelmed by a technologically driven French capitalist value system, to such an extent that it became obscured, making hardly any positive input into knowledge created in the quest for conflict resolution and maintaining the tradition of violence in the quest for political and economic power. Today the DRC is completely dependent on global knowledge systems for development and conflict resolution; with African knowledge largely ignored by those who have to prevent and manage conflict.

The unique value system of Rwanda of anomie, social exclusion, expansionism, and concentration of power demonstrates a collective memory of unstable and sometimes violent past and external pressures that instigated a continuous search for equilibrium in society and with societies surrounding Rwanda. In exploring opportunities for equilibrium, the Rwandan society invites in dominance of foreign values systems, nowadays technologically driven. Although the power relationship between the Rwandan system and the knowledge systems of the USA and Europe is marked by support from the latter, it is also seen to be formative and dominant, leading to a relationship of Rwandan dependence.

The knowledge base of Ugandan society displays some elements of a holistic knowledge base in the sense that a normative knowledge foundation survived colonialism and internal war. The empirical origins of norms and values are evident in the closeness to nature and reality. Furthermore, close integration with modern knowledge systems is evident in the view of the dynamic interaction of traditional Uganda with the modern environment. If compared with the nature of IKS in Rwanda and the DRC, the systems of Uganda appear to be more conventional, also if compared with philosophical discourse found in literature. However, the manifestation of theoretical propositions in the DRC and Rwanda proved to provide valuable insight into how knowledge in Africa is managed in a holistic way by merging the wealth of knowledge gained by traditional society with the knowledge claims of modern society in an attempt to solve problems.

4.7 FINDINGS

Literature illustrates that the origin of human knowledge was Africa and that ancient Egypt played a pivotal role in the development of an African knowledge foundation. Today a distinct African world view can be identified in the form of a set of traditions that view the world from a holistic perspective, seeing the spiritual world, observable world and the person as an integrated whole. This integrated whole appears to be mystic and secluded, a misconception that can be removed by understanding the oral tradition, cultural idiom, powerrelationships, symbolism and the quest for self-emancipation, which forms the foundation of African knowledge. Today one finds a sophisticated and scientifically founded knowledge base in Africa that can only be accessed through understanding of the unique idiom of the way in which the African sense and interprets events. The traditional African worldview displays a holistic cosmology characterised by oneness of mind, body, soul and the environment, which transcends even beyond the observable world. This view leads to interconnectedness, group-forming and alliance as a cultural trait such as Ubuntu in most African communities. The interconnected character of African knowledge often implies complex power-relationships guiding (and sometimes controlling) the sharing of knowledge, consensus where differences occur, the level of trust, the finding of synergy and the resolution of conflict.

The traditional African worldview is influenced by pressures from religion and ideology that resulted in a worldview characterised by a mixture of the traditional worldview, syncretism, socialism, liberation ideology, and capitalism. In this 'modern' African worldview the quest for economic self-emancipation meets the quest for the cultural revival of Africa and opens the way for finding equilibrium with the rest of the world. However, strong consciousness of the need for emancipation and a sub-conscious aversion to external domination persists. Therefore, in this middle ground African knowledge can be synthesised with global knowledge in a horizontal power-relationship into a new knowledge foundation to become indigenous knowledge in Africa that emerges as a vehicle for the revival of Africa. It was found that indigenous knowledge is vital for congruent decisions and actions that would ensure self-emancipation, lasting freedom, justice for all, and the maintenance of human rights in a secure and orderly environment.

The challenge is to use collective memory of the traditional cultural practices and pattern of instability and conflict to prevent those patterns from continuing and to bring justice where human rights were abused. For instance, reviving the traditional conflict management practice of finding forgiveness in the eyes of God and society and finding dysfunction within society (sometimes explained in terms of unique cultural idiom) as the major cause of conflict could restore equilibrium within society and with other entities. Moreover, it will prevent Western style management practices and principles from being imposed in a cultural environment, where they have proved to be inadequate to terminate the pattern of violence that is part of society.

The IKS of Africa is complementary to other knowledge systems that influenced and is still influencing the knowledge systems of Africa. It was also found that indigenous knowledge not always contradicts views from outside the continent, for example, the universal views on justice and human rights. However, there as certain perspectives that is significantly different and unique to Africa, such as the quest for emancipation from oppression and empowerment of African society. It is especially in the area of human rights and justice that a holistic view of causes, consequences and expectations is rapidly developing. The challenge however is to balance the current domination of Western views on, for instance, how conflicts should be resolved with the wealth of knowledge on traditional conflict resolution in Africa. It is foreseen, as common ground is found on the subject, through the adjustment of political agendas and the involvement of victims, that different worldviews would converge on how to prevent and resolve conflict in Africa.

Against the background of literature by several scholars, it would serve the purpose of this study to infer that African knowledge is a knowledge framework involving an empirical knowledge foundation underlying a normative knowledge foundation. To develop a new paradigm on how knowledge in Africa must be managed, the following variables had to be researched:

- How the holistic cosmology of Africa is practised in contemporary African society and in what way the trans-national organisation practises a similar holistic understanding of phenomena.
- How the African society and the trans-national organisation articulate differences in worldviews to each other and how both systems adopt or use value systems like Ubuntu in ventures like conflict resolution.

- How the principles and practices of Ubuntu could be applied to find common ground characterised by a synthesis of knowledge, a synergy of actions and the convergence of corporate responsibility and the expectations of African society.
- How African knowledge is managed to resolve conflict, ensure empowerment, selfemancipation, freedom, justice for all, and the maintenance of human rights of the African society (especially those on the periphery of society) while maintaining competitiveness and global reach in a growing knowledge economy.
- How written text (mostly in European languages) is analysed together with the truisms of oral texts and disclosures of the African knowledge system.
- How complex power-relations in the African society influence collective knowledge, including the reinforcing or dividing relationships of exclusivist religious practices and the practice of violent resolution of disputes.
- How knowledge management and learning takes place across cultural divisions by transcending physical and psychological boundaries, as well a the restrictive parameters of modern science, to find a collective middle ground characterised by a holistic view.
- How a network of partnerships and alliances functions as part of a global knowledge framework.
- How the quest for economic and psychological self-emancipation from disparity in development, self-disclosure of relevant knowledge and the philosophy of African unity and renewal is pursued.
- How enabling policy frameworks, human development and technological development contribute to the development of knowledge in Africa.
- How African knowledge systems complement and accommodate 'imported knowledge' to ensure a holistic view of causes, consequences and methods to find solutions to conflict in Africa.
- How suspicion about power-relationships and the controlling, pressure and demanding nature of modern knowledge-flow and technology is overcome, especially through the protection of indigenous knowledge, ensuring that no role-player is exploited during interaction and that the benefits of indigenous knowledge are use not only in the interest of trans-national organisations, but also for the emancipation and revival of Africa. The following diagram illustrates the findings on knowledge systems in Africa further.

Global Knowledge System Indigenous Knowledge in Africa Holistic Interpretation **Empirically Founded** Synthesis of Western, Arabic and Traditional African Norms Ubuntu Christianity Islam African Socialism Liberation Ideology Western Democracy Capitalism Human Rights Freedom Justice Modern Technology Pluralism Incluvism Syncretism African Knowledge Normative **Empirically Founded** Spiritual Ancestral Equilibrium Oral tradition Emancipation Natural Patterns Collective Memory Interconnectedness Protective

Figure 4.1: The African Knowledge System

CHAPTER 5: KNOWLEDGE MANAGEMENT FOR AFRICAN REVIVAL

'When we speak of the Renaissance we speak of advances in science and technology, voyages of discovery across the oceans, a revolution in printing, a spread of knowledge and a blossoming of the arts'- Thabo Mbeki

5.1 INTRODUCTION

The study of related literature, as presented in Chapters 2, 3 and 4 enabled the scholar to identify sufficient variables to formulate a conceptual framework (see Appendix B) that could serve as guide for empirical research. By comparing different schools of thought on what knowledge, African knowledge and the management of knowledge in Africa is, a comprehensive, thorough, but relevant framework is presented. In Chapter 4, it was concluded that a distinct African epistemology could be identified in the form of a set of traditions that view the world from a holistic perspective as an inclusive whole that is articulated through oral tradition, symbolism and cultural idiom and practices such as Ubuntu. African epistemology is characterised by unique power-relationships and quest for equilibrium and emancipation. Through a merger of religious, ideological and scientific practices, combined with the modern knowledge brought by the policy frameworks and technology of global power-relationships, knowledge in Africa emerges as a medium for the revival of Africa. The challenge lies in how to manage this body of indigenous knowledge as an asset to achieve the desired business and development outcomes of all stakeholders on the continent while meeting the expectations of the people of Africa.

The purpose of chapter 5 is to discuss how knowledge is currently managed in Africa to ensure peace and stability that would ensure these outcomes.

The Chapter departed from content analysis of the available literature, including literature published by the organisations and member countries themselves. Aspects such as conflict as obstacle to the implementation of NEPAD, RECs as building blocks of NEPAD, continental early warning system (CEWS), the African Peer Review Mechanism (APRM), the imperative of learning and the role of ICT was discussed. As a result, specific themes were identified for the field study.

5.2 THE DESIRED OUTCOMES FOR AFRICA

The African Renaissance is about developing Africans and Africa. It is a call for the rebirth renewal, reinvention and repositioning of Africans and Africa in a globalizing world. Furthermore, it is a call to Africans to relearn and rediscover who they are and where they are in a global scheme of things. It is a vision bigger than the African Union, NEPAD and many other initiatives by individuals, communities, governments and multilateral organisations. It is not an effort to emulate 'world class' standards set by others but to set world standards to be followed by others. The African Renaissance is seen as the rebirth of the continent after centuries of suppression, correcting negative images. Rebirth must be through rediscovery of Africa's past, reversing the downfall into chaos. It is about planning for the future based on a new knowledge framework accommodating the ideas and philosophies that created the great empires of Ghana, Monomotapa, Songhai and Mali. (Gutto 2005).

5.2.1 FORMAL OBJECTIVES

The OAU Charter, accepted in Addis Ababa on 25 May 1963, stipulates that the Organization have the following purposes:

- To promote the unity and solidarity of the African States;
- To coordinate and intensify their cooperation and efforts to achieve a better life for the peoples of Africa;
- To defend their sovereignty, their territorial integrity and independence;
- To eradicate all forms of colonialism from Africa; and
- To promote international cooperation, with regard to the Charter of the United
 Nations and the Universal Declaration of Human Rights

Article XIX of the Charter established the Commission of Mediation, Conciliation and Arbitration for member states to settle all disputes among themselves by peaceful means.

The AU superseded the AU when the Constitutive Act of the African Union of 11 July 2000, was accepted in Lomé, Togo. According to the 'Act' the objectives of the AU is to

 achieve greater unity and solidarity between the African counties and the peoples of Africa;

- defend the sovereignty, territorial integrity and independence of its Member States;
- accelerate the political and socio-economic integration of the continent;
- promote and defend African common positions on issues of interest to the continent and its peoples;
- encourage international cooperation, taking due account of the Charter of the United
 Nations and the Universal Declaration of Human Rights;
- promote peace, security, and stability on the continent;
- promote democratic principles and institutions, popular participation and good governance;
- promote and protect human and peoples' rights in accordance with the African Charter on Human and Peoples' Rights and other relevant human rights instruments;
- establish the necessary conditions which enable the continent to play its rightful role in the global economy and in international negotiations;
- promote sustainable development at the economic, social and cultural levels as well as the integration of African economies;
- promote cooperation in all fields of human activity to raise the living standards of African peoples;
- coordinate and harmonize policies between existing and future Regional Economic
 Communities for the gradual attainment of the objectives of the Union;
- advance the development of the continent by promoting research in all fields, in particular in science and technology;
- work with relevant international partners in the eradication of preventable diseases and the promotion of good health on the continent

One of the core objectives of the African Union (AU) is the promotion of peace, security, and stability on the Continent, as spelt out in *Article 3 (f) of the AU Constitutive Act*. To strengthen the AU's capacity in the prevention, management and resolution of conflicts, Member States adopted, in July 2002, in Durban, South Africa, the *Protocol Relating to the Establishment of the Peace and Security Council (PSC)*, which entered into force in December 2003. The Protocol, in *article 2 (1)*, defines the PSC as 'a collective security and early-warning arrangement to facilitate timely and efficient response to conflict and crisis situations in Africa'.

5.2.2 THE MAINTENANCE OF HUMAN RIGHTS

The African [Banjul] Charter on Human and Peoples' Rights adopted on 27 June 1981 by the OAU and as accepted by the AU, establishes the maintenance of human rights as a norm and desired outcome for Africa. Article 45 stipulates that the functions of the Commission shall be to promote Human and Peoples' Rights and in particular:

- to collect documents, undertake studies and researches on African problems in the field of human and peoples' rights, organize seminars, symposia and conferences, disseminate information, encourage national and local institutions concerned with human and peoples' rights, and give its views or make recommendations to Governments
- to formulate and lay down, principles and rules aimed at solving legal problems relating to human and peoples' rights and fundamental freedoms upon which African Governments may base their legislations
- Co-operate with other African and international institutions concerned with the promotion and protection of human and peoples' rights.

Article 46 stipulates that the Commission may resort to any appropriate method of investigation.

5.2.3 NEPAD AND THE AFRICAN RENAISSANCE

The most prominent contemporary initiative to implement the thinking behind the African Renaissance is driven by four African presidents General Olusegun Obasanjo of Nigeria, President Thabo Mbeki of the Republic of South Africa, President Abdoulaye Wade of Senegal and President Abdelaziz Bouteflika of Algeria. The principles of NEPAD were adopted at the inaugural summit of the AU in South Africa during 2002 as the vision and strategic framework for the renewal of Africa. The ultimate ends of NEPAD are to

eradicate poverty;

- put African countries individually and collectively on the road to sustainable growth and development;
- stop the marginalisation of Africa in a global context; and
- integrate the continent into the global economy

NEPAD (2001, 10-11) is a framework of interaction with the rest of the world, including the industrialised countries and multi-lateral organisations, based on an African agenda and initiatives. African leaders must take joint responsibility for aspects such as continental and regional mechanisms for conflict prevention, management, and resolution, together with other aspects regarding good governance. Furthermore, creative partnerships between private and public sector are encouraged.

NEPAD (2001, 52) discusses the establishment of new relationships with industrialised countries and multilateral organisations. Stating that the new relationship should establish mutually agreed performance targets for both donor and recipient, it expresses the wish that partnerships with industrialised countries and multilateral institutions will be maintained.

Under the heading 'Reversing the Brain Drain', NEPAD (2001, 30-31) express the objective of using Africans in the Diaspora for the development of Africa. Promotion of networking and collaboration between experts in the country of origin and those in the Diaspora is a stated intention. Furthermore, it is planned to develop scientific and technical networks to channel the repatriation of scientific knowledge to the home country to establish cooperation between those in Africa and those abroad.

NEPAD (2001, 36) stated an objective to promote cross-border cooperation and connectivity by utilizing knowledge currently available in existing centres of excellence on the continent. Furthermore, NEPAD aims to adapt an information collection and analysis capacity to support productive and export activities. Actions that are planned revolves around the establishment of regional cooperation on for instance geographic information systems (GIS), networks among centres of excellence to develop plans, cooperation with international organisations to harness indigenous knowledge, enhancement of geo-science research and the development of skills-based product engineering and quality control.

NEPAD deals specifically with conflict resolution as a peace and security initiative under the heading of conditions for sustainable development. *Articles 72 to 74* state that the peace and security initiative consists of three elements, namely

- promoting long-term conditions for development and security;
- building the capacity of African institutions for early warning, as well as enhancing the capacity to prevent, manage and resolve conflict; and
- institutionalising commitment to the core values of NEPAD through leadership

NEPAD reflects the view that the continent's leadership needs to accommodate world politics, and to adjust to the realities of neo-liberal globalisation. NEPAD acknowledges that this process of accommodation must involve internal political and economic reforms according to liberal democracy and neo-liberal economics. It assumes that for Africa to play a prominent role in the 21st century, it must be part of universalism, otherwise called neo-liberal globalization. (Anyang' Nyongo, 2002). The founders of NEPAD recognise that the programme does not exist in a vacuum. There are many initiatives and processes in progress already, e.g. the UN Millennium Declaration, the G-8 Okinawa Declaration, the Copenhagen Declaration, the Skagen Declaration, the Contonou Agreement, the EU/Cairo Plan of Action, AGOA, TICAD, the Sino-African process, etc. It is emphasised that that NEPAD does not seek to compete with them, but rather establish linkages and synergies between NEPAD and these initiatives, and to see where each initiative can make the greatest contribution. In essence, NEPAD provides the focal point and the overall strategic framework for engagement as Africa's chosen agenda for development. (Oden 2002).

The NEPAD initiative currently enjoys extensive support throughout the continent. Adedeji, (2002) asserts for instance that Africa must take all measurements to put the AU on a sustainable foundation to enable Africa to compete during the 21st century. This requires fundamental reshaping of the political economies, the democratisation of the development process and the conduct of a new national and regional economic order. The African states and leadership must perform jointly in the field of development.

According to Gutto (2002) as imperfect as they may be, NEPAD and the AU currently represent the emerging new African spirit and minimum standards. Nevertheless, it is also important to point out that no amount of good governance, rule of law and human rights alone are sufficient to pull the African continent out of the historical quagmire that Africa finds itself. Favourable external conditions and a favourable environment to supplement and

support Africa's efforts are equally important. NEPAD and the AU, and in particular their emphasis on regional and sub-regional cooperation and partnerships, as opposed to narrow prejudiced nationalism and sovereignty, offer Africa' people the opportunity to meet the challenge. (Gutto 2002).

5.2.4 CONFLICT RESOLUTION

The vision of the AU is based on a united and strong Africa and on the need to build a partnership between governments and all segments of civil society in order to strengthen solidarity and cohesion among the peoples of Africa. As a continental organisation, it focuses on the promotion of peace, security and stability on the continent as a prerequisite for the implementation of the development and integration agenda. African leaders should therefore be held accountable by the people of Africa to deal vigorously and effectively with conflict resolution and the implementation of good governance principles. (Venter 2005, 139).

The current priorities for NEPAD are to eradicate these causes through the prevention of conflict, resolving it where it occurs, managing it when it is still in a stage of being resolved and to reconstructing society once the conflict has been resolved, removing all obstacles towards the revival of Africa. Intrastate and interstate political violence continue to form a critical mass of conflict that affects the every day life of the peoples of Africa. Long-running African conflicts such as those in the Sudan and Somalia, as well as in Sierra Leone, the DRC and Burundi, remain deep-rooted. There is therefore little sign that AU and NEPAD policies on conflict resolution have beneficiated sub-Saharan Africa to date. The gap between political policy development and policy implementation remains substantial (Venter & Rohan-Irwin, 2005).

Herbst and Mills (2005) posed the question whether regional integration through NEPAD and the AU and its sub-regional bodies is possible or desirable among diverse countries. Seeing the problem from the perspective of unstable states, they reply that before integration of African states with one another is attempted, some internally unstable countries need to pull themselves together. With this proposition, the scholars draw the attention to the question of peace and stability as a prerequisite for success.

Several factors are inhibiting the efforts of the AU and NEPAD, especially conditions in post-colonial states. Afro-pessimists have published ample material on the causes of instability and conflict in Africa; extensive content analysis of reliable literature revealed that inadequate governance, scarcity of resources, human rights abuses and lack of skills to implement plans currently impede human security and development in Africa. The socio-economic decay in terms of health, education, and food production is also a matter of concern. Environmental realities such as floods and droughts contribute to these conditions. Added to that is the mostly negative role of armed groups that act beyond the control of the state, with resultant threatening coups and the proliferation of small arms and land mines. Moreover, reaction to global influences is a matter of concern: some countries have become havens and targets for international terrorism, diamond smugglers, mercenaries, and international crime syndicates. (Velthuizen 2005, 7).

5.2.5 EVALUATION

Instruments such as the OAU Charter of 25 May 1963, The Constitutive Act of the African Union of 11 July 2000, The African [Banjul] Charter on Human and Peoples' Rights of 27 June 1981 and the objectives of NEPAD forms a convenient framework to establish clearly the desired outcomes for Africa. It is also evident that the ultimate outcome is the establishment a new value foundation consisting of values like the human rights and justice and the re-erection of all pillars of African society to revive Africa as desired security, social or economic outcomes.

Concerning human rights, it is evident that the principles of justice and freedom are enshrined in the normative foundation of Africa. To pursue these principles a legal framework has been created to gather information to ensure that the state of human rights is known and that knowledge of perpetrations are managed in a collective way to prevent the spreading of human rights abuses. It is in the area of human rights investigations that the principle of collectiveness is detected.

However, the maintenance of human rights is to a large extent dependant on the maintenance of peace and security. To manage conflict trust and confidence is vital to minimise the escalation of a conflict. Good offices or forums in which combatants may negotiate an end to ongoing conflict are used. During this phase, humanitarian assistance is provided and

resolutions proposed that would suit the specific situation, including material assistance to populations that are victims of violence, natural disaster and epidemic disease and to efforts to repatriate and resettle refugees. This phase is also marked by diplomatic intervention. Conflict management is only successful in the sense that it prevents immediate escalation and an illusion of peace. It does not solve either the roots of the conflict or its consequences.

The objective of conflict resolution is therefore to establish sustainable peace by rebuilding civil society and state structures. Agreements are negotiated, after which a process begins to implement the contents of the agreement. Conflict resolution is a long-term project, during which any part of the agreement could fall apart, requiring temporary management of specific situations. Once an agreement is reached, peace missions are used to provide security during conflict management and resolution. Political legitimacy is provided by the UN or AU Charter. The execution of peace missions is complex and demanding on military forces of the participating countries, and in most cases the presence is more symbolic than effective. In many cases, peacekeepers or peacemakers are not welcome in the area of operations. The general experience in Africa is that peace missions as a conflict resolution and management measure are inadequate to ensure lasting peace and security.

For a conflict prevention mechanism to work, certain prerequisites are vital. Access to processing and dissemination of information is vital for early warning to be effective. Indicators must be developed to identify a threat to security and the need for timely action. Information centres with databases, which can be electronically accessed, and other more direct forms of dissemination must be developed to inform decision takers and society of pending conflicts. Knowledge workers from governments, NGOs and business must cooperate to analyse information and inform the decision-maker in a responsible manner. Then it is vital that early warning be translated into early action.

Two important aspects become evident. Firstly, it is clear that the intention of NEPAD to participate in a dynamic global environment is to be supportive of conflict resolution initiatives, and that the imperative of interaction is accepted. The fact that Africa tends to be an unstable system and that it is vulnerable to a dominant worldview, pressure, demands, and even control from more stable and powerful entities is not fully articulated in policy frameworks.

Secondly that the intention is that state structures, regional structures and continental structures interact with one another in an complex network of collaboration in order to address sustainable resolution and management of conflict. The ultimate desired end-state is to prevent conflict through early warning and appropriate action, in order to realise not only the objectives of NEPAD, but also the vision of the African Renaissance. The central role of visionary leaders and a framework of higher values are also highlighted for these initiatives to succeed. In the management and production of knowledge, the needs of the security architecture of Africa will have to be considered, including the needs of governance on all levels for quality knowledge products to make decisions in the interest of transforming and developing countries.

The NEPAD initiative implies that conflict prevention and resolution in unstable countries is driven by a dominant Western worldview through continental peace and security initiatives. However, it also implies that interaction in a network of role-players would lead to a more complete and holistic view of the causes of conflict and possible solutions. In this regard, it was found that African knowledge systems are complementary to other knowledge systems and that indigenous knowledge not always contradicts universal views on aspects such as justice and human rights. However, the quest for emancipation from oppression and empowerment of African society demands a balance of African views with the current domination of Western views on how conflicts should be resolved.

5.3 THE CONTINENTAL EARLY WARNING SYSTEM

The premise of conflict prevention is that conflict can be averted through the building of trust between role players, coalition formation and negotiated settlements. Conflict prevention mechanisms must be in place, supported by early warning and risk assessment systems.

Perhaps the most important integrated project for creating a peaceful and secure environment for African development is the establishment of a CEWS of the AU. According to the Protocol of the Peace and Security Council (PSC), timely information collected through a CEWS will be used by the Peace and Security Council on potential conflicts and threats to peace and security in Africa. The CEWS will be linked to regional situation rooms. Decisions on the best course of action will be based on this intelligence, and should preventive diplomacy fail, peacekeepers may be deployed to prevent violence. At present,

the Economic Community of West African States (ECOWAS), the Southern African Development Community (SADC), the Economic Community of Central African States (ECCAS) and the Intergovernmental Authority on Development (IGAD) (the most developed system), have plans in place for sub-regional early warning systems, in different stages of development. The CEWS is specifically mandated to collaborate with the United Nations, its agencies, other relevant international organisations, research centres, academic institutions and NGOs. Although the Protocol requires that meetings of the PSC be to be closed, the PSC may consult with civil society organisations in relating to conflict situations. A 'Draft Roadmap' is developed to establish the CEWS. The analytical and mediating capacity of the CEWS is increasing to culminate with the establishment of the Panel of the Wise. (AU 2005).

During an AU workshop on the CEWS in 2003, some concerns were expressed. Because the analytical dichotomy between intra-state and inter-state conflict is not clear in Africa, early warning tends to focus on intra-state conflicts. Furthermore, the concern was expressed that time constraints associated with early warning have policy implications, delimit the extent of knowledge on conflict and determine prospects of whether intervention will be successful or not. Therefore, an early warning mechanism must focus on both long-term aspects of conflicts and their prevention. Moreover, the importance of group thinking was identified. The homogeneity of a group can drive the use of the information, especially the interpretation of and action on the information. (AU 2003).

According to Schneider (2004) the capacity to prevent forms the core of early warning. Governments and intergovernmental organisations need all the help they can get. As budgets tend to shrink, there seems to be less capacity than ever to track and monitor fragile situations and conflicts in the making. As a result, there is a larger role to be played by non-governmental role players including the media and NGOs. NGOs can produce ground-level information and analysis and communicate instantly through laptops, satellite linkages and the internet. That information can be used to build a prevention strategy.

Anderini and Nyheim (1998) argue that there is a co-ordination problem between information gatherers, analysts, decision-makers, and field workers. Among organisations, there is still some reluctance to share information or act on the information gathered by others. Organisations cannot automatically trust every source, so unless the information comes from

their own workers, or from reliable sources, little action will be taken. Priorities also differ. While one is warning about an impending crisis in one region, another organisation is active in a different area, and will not or cannot respond immediately to the warning. Even when there is a response, there may be conflicts of interest and little co-operation. Decision-makers and information analysts aim to maintain objectivity and may not know what the most appropriate responses are. Their counterparts in the region and the local population are best placed to identify the necessary responses but their perspective may not be entirely objective or impartial. Consequently, the action taken is often inadequate, of no benefit, or in the worst cases, actually serves to heighten a crisis.

During a meeting of governmental Experts on Early Warning and Conflict Prevention (2006) it was found that a number of African Community Service Organisations (CSOs) are active in the areas of analysis, research, publication and advocacy, with a huge potential to contribute in the conceptualization and designing of a new security architecture for the continent. If their analyses of conflicts derive from indigenous sources, it would be valuable tools for indepth analysis of conflicts and the development of appropriate response mechanisms. CSOs could also alert the regional body of conflicts, the factors that encourage escalation and the trigger mechanisms that cause violence. Active collaboration with such CSOs would also assist in profiling and database management. A number of indigenous 'think-tanks' have actually made positive and practical contributions to policy development at both the regional and sub-regional levels, through active collaboration with the AU (and OAU before it) and other sub-regional bodies. Currently several African CSOs are building considerable capacity in this area. Such 'think- tanks' can be mobilized to conduct research for, and on behalf of, the AU in current and potential conflict zones. Importantly also, they can help to disseminate the work of the AU among key constituencies through their publications and other outreach activities.

An evaluation of the CEWS confirmed that global and regional interaction, and even networking with civil society and non-governmental entities is important to enable data gathering, including data from IKS, and a constant flow of information that can be shared in a spirit of willing collaboration and inputs from all role-players. Furthermore, the variable of time constraints is identified in the processing of data and information and the creation of new knowledge. To produce holistic knowledge takes time, and flexible procedure has to be implemented to allow for early dissemination of knowledge that prevents conflict or that can

initiate a specific conflict resolution or management action. However, the reluctance to share and the absence of objectivity among analysts are variables to be managed by managers, who are made responsible for facilitating synergy and convergence. Again, the roles of visionary leaders, who must apply their 'higher minds' to ensure that insights from all stakeholders, including indigenous knowledge, are merged and used in time to prevent conflict, are confirmed. Leaders and 'wise people' must ensure that a horizontal equilibrium is maintained during interaction, preventing that the views of one region or institution dominates the whole, while preventing central control, aspects that would prevent early warning and effective action to resolve conflict.

5.4 THE REGIONAL ECONOMIC COMMUNITIES

NEPAD (2001) accepts that long-term conditions for ensuring peace and security in Africa require policy measures for addressing the political and social vulnerabilities on which conflict is premised. Efforts to build Africa's capacities to manage all aspects of conflict must focus on the means necessary to strengthen existing regional and sub regional institutions, especially in four key areas

- prevention, management and resolution of conflict;
- peacemaking, peacekeeping, and peace enforcement;
- post-conflict reconciliation, rehabilitation and reconstruction; and
- combating illicit proliferation of small arms, light weapons and landmines

The AU Summit of 2002 recognised these challenges and committed to effective partnership between RECs in the promotion and maintenance of peace, security, and stability. A further step was the 2004 the AU Summit, which adopted a Memorandum of Understanding (MoU) between the AU and the RECs on KM responsibilities. According to the MoU, RECs should maintain a database and transmit quarterly reports to the PSC of the AU. Regular networking must be ensured, including visits by officials charged with implementation and REC representatives must attend AU meetings. Focal points must be created for liaison between regional mechanisms and the mechanisms within the AU. A guideline that was given is that conflict situations on the continent should be monitored by gathering information based on specific indicators.

Among others, the AU accredited the East African Community (EAC) as one of the RECs of the AU. This was a major achievement because the EAC can now also benefit from the NEPAD programmes. There is however a realisation that the current level and method of financing the AU is unsustainable and Uganda only partially met its financial obligations to AU. (AU, 2005).

Another relevant example is the participation of the Intergovernmental Authority on Development (IGAD), a regional grouping founded in 1986 of seven Eastern African countries of Djibouti, Eritrea, Ethiopia, Kenya, Somalia, Sudan and Uganda. Member countries of IGAD shall act collectively to preserve peace, security, and stability, which are essential prerequisites for economic development and social progress'. The Peace and Security division focuses on enhancing the capacity of member states in the field of conflict prevention, management and resolution through dialogue, facilitating reconstruction and resettlement of people affected by disaster or conflict and promoting mechanisms to enhance sustainable peace, security and stability in the region. In 1995 IGAD member states recognised the need to address 30 potentially threatening inter-communal conflicts, a collapsed state due to internal conflicts (Sudan); a recent interstate war between two member states (Eritrea and Ethiopia), a number of widespread violent cross-border pastoral conflicts and the continued threat of inter-state wars arising from cross-border inter-communal and inter-clan conflicts. Subsequently, CEWARN was established to enable member states to prevent cross-border pastoral conflicts from developing into armed violent conflicts on a greater scale, to enable local communities to play an important part in preventing violent conflict, and to enable the IGAD secretariat to pursue conflict prevention initiatives and to provide technical and financial support. (IGAD, 2006).

A further important KM event was the establishment of the 'Tripartite Plus Intelligence Fusion, Operations and Analysis Cell' (TFC) in Kisangani DRC by the security and defence sub-committee of the Tripartite Plus Joint Committee of Uganda, the DRC, Rwanda and Burundi and facilitated by the USA. (Mukiibi 2006) The Technical Sub-commission on Defence and Security Matters established under the Tripartite Agreement on Regional Security in the Great Lakes Region signed a MoU on 2 February 2005 on the establishment of the Intelligence Fusion, Operations and Analysis Cell. On 25 August 2005 Burundi was added as a full partner in the Tripartite Agreement and the arrangement became known as the Tripartite Plus. The objectives of the TFG are

To process (fuse) the information or nationally-derived intelligence into a usable product that shall be disseminated to the designated focal point of each country.

 To develop actionable intelligence and recommend credible courses of action for consideration and approval by the Sub-Commission on Defence and Security Matters.

During 2006 focal point offices (FPOs) were established in Kampala, Bujumbura, Kigali and Kinshasa. Procedures for 'Operationalising Actionable Intelligence' include the immediate actions of disseminating intelligence to all FPOs simultaneously and passing intelligence to their national authorities to take necessary actions to prevent or eliminate an immediate threat. Actions for self-defense must be confined within national borders. It also includes procedures for 'planned action', which involves making recommendations to the Security and Defence Sub-Commission for approval. Apart from the TFC chairman ensuring that all discussions are conducted in accordance with the MOU, he serves as liaison officer between the TFC and the United Nations Observer Mission to the Congo (MONUC) regarding security matters, coordinates request for information and does quality control of production, analysis and dissemination of all TFC products. The TFC analyst interprets incoming messages to identify gaps in information, validate information and update a database and the The mentor from the USA ensures that operations are conducted in situation map. accordance with established procedures and assists the TFC in planning, processing, analyzing and disseminating information and serves as 'a neutral advisor' to address incongruity among member delegations or competing intelligence information. Current concerns are communication problems, lack of clarity on cooperation with MONUC and a problem to verify information. (Tripartate Plus 2006).

When the activities of the selected regional organisations are evaluated against the conceptual framework, some important variables are highlighted concerning the KM contribution to collective peace and security in Africa. The first observation confirms the proposition that policy and planning frameworks should be in place to enable KM for conflict prevention. The second observation confirms that a group of knowledgeable people (in this case especially managers and experts) is needed, who will collaborate in the management of knowledge, including the process of making the data tangible and creating a synthesis in order to supply intelligence for action. Especially the role of the middle manager, to facilitate synergy and convergence, is emphasised.

Furthermore, the proposition that formal networks and nodes of knowledge, within the context of global integration are needed for KM is confirmed. It was observed that a wealth

of social and intellectual capital is embedded in the peace and security architecture of regional communities, which compensates for limitations on physical resources and funds. A concern that was detected is the question whether a power equilibrium can be maintained in the case where KM initiatives are 'mentored' by a super-power such as the USA and to what extent the knowledge venture is driven as an exploitative relationship in comparison with making a positive contribution to peace and security in the region. This will probably depend on how privileged knowledge is shared among participants and with other entities such as civil society, and to what extent the knowledge product adds value to the prevention of conflict.

5.5 THE AFRICAN PEER REVIEW MECHANISM

The Inaugural Summit of the AU of July 2003, in Durban, South Africa, endorsed the NEPAD progress report and initial action plan and encouraged member states to adopt *the NEPAD Declaration on Democracy, Political, Economic, and Corporate Governance*, and accede to the APRM. After years of difficulties and African pessimism, some leaders thought that it was time to act rather than wait for others to come and solve their problems. They realised that there was a need to create an atmosphere conducive to development and to create conditions that would encourage the private sector to invest in African economies.

The first step in the APRM process of self-assessment, agreed to by the Heads of States and Government, was to assist member countries to determine the strengths and weaknesses inherent in some states that would result in a plan of action for each country and support from peers and institutions to assist in overcoming the different challenges facing these states. In contrast with past assessments carried out on African countries, the APRM is voluntary. Countries are not obliged to accede.

The MoU details the process and outlines the obligations that need to be fulfilled. For the peer review a national commission is created, in which the media, parliament, including opposition Members of Parliament, NGOs, human rights groups, the youth, gender groups, and business participate. This commission carries out a self-assessment, evaluates the weaknesses and strengths of the country, and formulates a plan of action. The commission's report is presented to the APRM Panel of Eminent Persons, appointed to oversee the process and ensure its credibility by acting independently.

The panel reviews the report in consultation with experts appointed to verify the information in the report. A mission (comprising at least 10 persons specialising in the different areas of APRM) meets with the different stakeholders to scrutinise the report and to find out if there is consensus on its contents, and if there is the necessary willingness to participate in the APRM. The report of the experts is then presented to the relevant government, which decides on steps to be taken to implement the recommendations.

From this stage, the report is presented to the Forum of Participating Countries of the APRM who scrutinises the report with the government concerned and determines the needs of the country, including technical support. If there is resistance from the government to take measures to rectify identified problems, the forum exerts peer pressure, by peaceful dialogue, to persuade the government to take up the issues raised and move forward. The spirit of the whole process is a peaceful and non-violent resolution to take up the challenge of NEPAD.

A review takes between six and nine months and depends on the availability of data and the resources of the particular country to conduct the process of data collection, to be reviewed and assessed by independent experts of the African Development Bank, Economic Commission for Africa, Association of Central Banks and civil society. All these efforts will be merged to get the most current and accurate data. The important aspect of the process is its participatory nature. The citizens are part of it and the country's report will be made public after it has been presented to the forum for citizens to check the process and the progress of implementation. Political maturity of the civil society will help make the process a success.

Rwanda has been among the first African countries to pioneer the implementation of the APRM. Apart from revealing shortcomings such as lack of adequate capacity in the APRM/NEPAD secretariat, inadequate fluency in the coordination structures, constraints of time and resources, the standards of objectivity as the ultimate test of the credibility of the whole APRM process were challenged by the Republic of Rwanda. It was suggested that it is in the interest of everyone that the process meets stringent standards of objectivity. It was suggested that it is possible for a country to carry out an objective self-assessment, and in the case of Rwanda every effort was made to make the process as objective as possible. It is also for this reason that an external review is a key component of the APRM and a counter weight

or verification mechanism. Rwanda suggested that some additional measures should be put in place to make the exercise more objective. Given the recent history of Rwanda, it seemed as if some external reviewers did not have adequate knowledge of the country and based their views on preconceived ideas and inaccurate information about the country found in different media. There is a need to base reviews on clear objective criteria or score matrix. This would certainly make the exercise more predictable, empirical and scientific. It was also suggested that a minimum requirement for objectivity should be that the final report has to be subjected to a process of moderation before it is tabled before the Heads of State. In addition to the challenges outlined above, there were other problems e.g. language impediments, especially in the rural areas where the questionnaire had to be translated in order to obtain the views of the population. (Republic of Rwanda 2006).

In November 2006, Sudanese billionaire Mo Ibrahim launched the Ibrahim Index for African Governance, a new ranking of sub-Saharan African nations developed in conjunction with the Kennedy School of Government at Harvard University. The rule of law and security will weigh most in the index, ahead of human development, economic development, democracy, transparency and empowerment of civil society. Professor Robert Rotberg, director of the programme on intrastate conflict and conflict resolution at the Kennedy School, under whose direction the index was developed, argues that every indicator is made possible by human and state security. The index will be used to measure and benchmark good governance in Africa on a country-by-country basis. Ibrahim insisted that the index would not duplicate the APRM. He argues that the APRM is subjective, as its outcomes are measured by focus groups, public opinion and sentiment.

Rotberg adds that the APRM is not a 'strong instrument' and that in some places the entire process has been taken over by governments. Rotberg said the index would be measurable and not based on what governments say. He disagreed with the concerns of some analysts that the programme is focused on individuals, pointing out that 'leaders make a difference and big leaders make a big difference'. Rotberg said that the Ibrahim index would have a 'diagnostic effect', prompting states to ask themselves how they can improve where there are shortcomings. He said the index would compare and rank countries. Addressing concerns that the Ibrahim Index could be seen as patronising, Rotberg argued that the index is globally applicable and not drawn up according to Western standards but standards that can be used in

Africa. He said the index is meant to be neutral and context free and without political bias. (Zvomuya 2006)

Evaluation of the APRM against the conceptual framework shows that valuable KM practices are embedded in the APRM, which can assist with the performance of post-colonial states in carrying out their continental commitments and any organisation involved in trans-national business. The first aspect is that several role players are afforded the opportunity to gather information and to find synergy in insights, continuously learning from one another. Secondly, African society interacts in various ways as equal partners to add value to the gathered information with minimum pressure from the global environment. Furthermore, the countries involved are given ample opportunity to reject interaction if it is found to be exploitative, demanding or controlling while countries accept a measure of pressure if that pressure is found to be supportive of not only the national interests but in the interest of continental initiatives. The report of the review also serves as a good example of a knowledge product with holistic perspectives suitable for decisions and actions.

However, the researcher has been alerted to the potential of exclusion of normative knowledge claims, especially knowledge situated in the periphery of state structures because of language and capacity limitations. Especially the exclusion of the traditional claims of the IKS because of lack of capacity to access oral data is clearly a challenge. This specific factor distracts value from the APRM report and probably omits important knowledge that could have alerted everybody concerned of potential sources of conflict, especially in remote areas beyond effective state control. Whether alternative instruments such as the Ibrahim Index and several others used by research institutions will overcome these limitations, to enjoy the same legitimacy and acceptability as an APRM, which was created by Africans for Africa, is still subject to evaluation.

Whatever instrument is used to get an objective and holistic view of Africa and its challenges, the control of Africans over the gathering, processing, dissemination, and use of the knowledge is imperative. Moreover, it will have to include measuring of progress about the redressing of imbalances within African society, the quest for emancipation from domination of and convergence with the developed world and more weight on human security than state security, measuring not only the performance of political leaders but also the leadership of traditional and civil society.

5.6 THE EXPECTATIONS OF AFRICAN SOCIETY

Neuland & Venter (2005, 25) assert that policy measures of governments and governmental institutions to deal with conflict resolution in the NEPAD context should be complemented by a public peace process because the causes of many conflicts are outside the reach of government-based diplomacy. The role of citizens and public organisations is crucial in building positive political relationships between people via public peace processes in conjunction with official peace processes. The public peace process takes place in the political arena and focuses on systematic dialogue among individuals from conflicting groups to probe the dynamics of their conflict, to think together about obstacles to change their relationship and eventually to design a sequence of interactive steps that might remove those obstacles. A process transforms conflict so that parties can both end violence and build the peace necessary for addressing post-conflict problems. It is not just negotiating technical solutions to technically defined problems but a convergence of the roles of citizens, public organisations and NGOs with the role of government during conflict resolution.

In this regard, the findings of the West African Regional Parliamentary conference, Accra, Ghana (2002) are of significance. According to the findings, parliaments should hold periodic public forums or hearings to engender discussions on non-partisan bases so that national interest on issues becomes the rallying point to incorporate all people. Members of parliament should be encouraged to consult and mobilise public opinion to support the objectives of NEPAD. Special efforts should be made with respect to civil society organisations, religious organisations, labour, sport and other bodies as well as NGOs that have roots in communities. Advocacy institutions and other NGOs may also be consulted where appropriate.

Recommendations by the NEPAD Civil Society Forum on building stronger partnerships with civil society (2003) must also the noted. The forum suggests that civil society is urged to organise a database of good practices from Africa to contribute to the implementation of NEPAD. The forum urged African governments to hold regular consultations with civil society and provide information on the implementation of the NEPAD process to enable it to participate meaningfully in a sustained partnership. Concerning provision of information on the objectives of the NEPAD, the Forum suggested that governments must embark on a public education campaign to educate the public on the objectives of the NEPAD and seek

their participation. It has been suggested that the NEPAD document could be translated into local languages, and further developed into leaflets, brochures and posters and integrated into curricula for teaching at schools. The forum suggests regular interaction among civil society and between civil society, government, the private sector, and other partners to address the challenges and monitor progress made.

In this regard, several initiatives have been launched. For example, during a KM Practitioners Workshop in Mangaung, South Africa (2005) the question was asked on methods to address the legacy of colonialism, institutional failure, and policy failure, as being the underlying causes of pervasive poverty in Africa (Mbanga, 2005). According to the findings of the workshop, the answer lies in an integrated approach that would synergise institutional, technical and policy instruments in combating poverty. Such an approach would require a robust analytical tool in the form of a policy matrix that consists of three strategic objectives and six corresponding strategic actions in the form of sector priorities identified in the NEPAD document.

	Agricul-	Bridging the	Human	The Environment	Culture	Science
	ture	Infrastructure	Resource	Initiative		and
		Gap	Development			Techno
						-logy
Eradicate						
Poverty						
Adopt						
Sustainable						
Development						
Strategies						
Effectively						
Participate in						
the Global						
Economy						

Figure 5.1: Policy Matrix

Each of the sector programme priorities will have to be developed further in the form of strategies and measures. In this context, it would be appropriate to construct a policy matrix

for each of the sector programmes of action. The usefulness of the matrix as an analytical tool is that it would enable a policy analyst to examine specific actions to address strategic sector objectives and effective participation of Africa in the global economy of the 21st century simultaneously. Another way of using the matrix is to move vertically (or take one column at a time). For instance, one could start with the strategic objective of poverty eradication and look at specific measures that have been identified as anti-poverty measures/actions in the six sector priorities.

Mbanga also describes a concentration of economic activities in 'global city-regions', those cities are 'territorial platforms from which groups of firms contest global markets'. He suggests the importance of cities as centres of innovation and learning within a knowledge-based economy. He furthermore recommends the opening of a reliable channel of communication between the metropolis and its stakeholders and the free flow of continuous, open, relevant and understandable information. It has been found that the public needs good information to understand, respond to, and influence government policies and programmes. The motivating ideal for a local government must be to provide easily accessible information and services. Mbanga illustrates the integrated approach and flow of information among entities in a metropolis:

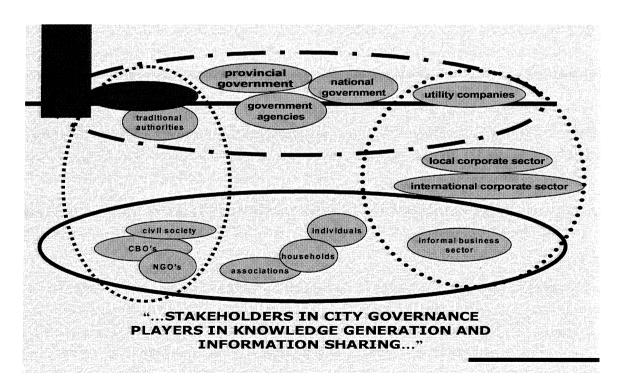


Figure 5.2: The Mbanga Paradigm

The 'Mbanga Paradigm' promotes the inclusion and participation of the public, including civil society, traditional structures, community organisations and individual citizens into a synergistic relationship marked by constructive dialogue and a convergence as role players to meet continental challenges and the challenges of a global environment. The importance of the knowledge foundation of the structures outside formal government structures is recognised and stakeholders are encouraged to render knowledge tangible to ensure that interaction and merging of insights take place equally. Especially in view of the implied relationship of vertical communication where government takes the initiative to inform, consult, educate, and provide policy frameworks, it is important that the relationship be redressed to ensure horizontal equilibrium between government and the public. The policy matrix proposed by Mbanga is appealing for practical use not only because of its simplicity, but also because it can easily be adapted to include or focus on the peace and security sector objectives and strategy to ensure cooperative interaction among role players to process information and produce knowledge.

Nabudere (2002a) warns that African scholars and civil society should not follow agendas set by the new imperialism, which tries to incorporate 'civil society' and 'other stake-holders' into mainstream programmes of domination such as the NEPAD. The task of scholars and civil society in Africa is to be critical and radical in analysing society if the objective is to bring about social transformation in African societies. Research in Africa must seek to liberate and empower the marginalised to fight for their rights for self-transformation. Africans cannot liberate, empower and transform themselves if at the same time they apply their energy to be part of the implementation of new programmes of the new imperialism and its agencies, such as the NEPAD.

The proposition of the metropolis serving as a knowledge node enables, for example, aspects such as trans-national interaction and learning, as long as the channel of communication and interaction with those outside the metropolis is open, including those communities on the periphery of state control and global reach. It is therefore important that whatever programme is implemented, that it should serve to liberate and empower the marginalised to promote self-transformation and participation as equal partners in the global arena, as a measure of preventing expectations and frustrations causing or stimulating conflict, especially in terms of sharing knowledge with the communities.

5.7 THE DESIRE TO LEARN

The Constitutive Act of the African Union that entered into force on May 26, 2001 recognizes the importance of human resources development and the significant role that science and technology can play in regional integration and socio-economic development. To facilitate the attainment of the required level of development, and to help Africa to move to a higher level of using science and technology for development, the AU established the Department of Human Resources, Science and Technology with the following mandate:

- to promote and coordinate policies in human resource development, science and technology; and
- to build the capacity for harnessing, managing and utilizing science and technology, including ICT

Among others, the need to revitalize higher education in order to address the problems facing the continent and also to strengthen and support the establishment of Centres of Excellence, were addressed. In order to support the Centres of Excellence, the AU Department of Human Resources Science and Technology is in the process of reinstating mobility programs with the support of partners such as UNESCO, for lecturers and professor of African universities for the purposes of capacity building. Research and development in the field of indigenous or traditional knowledge continues while indigenous knowledge in Africa remains an underutilized and under-valued resource, which countries like China and India have developed to their advantage. The AU facilitates capacity building in the development of IKS policies. (Esaayed 2005).

The importance of relevant education for the entire Africa is highlighted on three levels by NEPAD. Addressing the 'education gap' in Africa NEPAD (2001, 29) has set the objective of working with donors and trans-national institutions to ensure that achieving the development goal of universal primary education by 2015 is realised. Furthermore, the objective was set to improve curricula, quality, and access to IT and to promote networks among tertiary institutions about specialised research. In sub-Saharan Africa, the region with the highest levels of illiteracy in the world, many pupils are still being denied their fundamental right to quality education. There are signs of progress for higher education in sub-Saharan Africa, and some African countries have put policies in place to strengthen tertiary education. Progress is limited in comparison with the progress of other world regions. According to the

United Nations, almost 50 % of the continent's primary school age pupils are not in school. Fewer children get a chance to finish primary school. Africa is moving slowly toward the Millennium Development Goal (MDG) of universal primary education (UPE) but indications are that Africa will not achieve UPE until at least 2150.

Nongxa (2005) states that the engines of development in Africa are the universities and because it is less expensive than networking abroad he encourages the sharing of skills among researchers in the African context, What he calls 'smart second generation partnerships' must be developed on a multilateral level. Aid and technical arrangements must be replaced by real capacity building, especially on the intellectual level. He proposes multilateral networking to mobilise and disseminate knowledge products from knowledge workers.

During 2005, the creation of a continental university as a centre of innovation and academic excellence was recommended by the Pan African Parliament (PAP). MP Miria Matembe told reporters at the conclusion of a session that Africa need to have Africans educated and trained in science, technology and information technology. She insisted that human-resource development is important for Africa. Other countries in the world are advancing because of technological advances. Africans can do their own research, innovation and technological invention.

A workshop by the Global Development Network (2005) found that the major challenges for KM lie in obstacles to knowledge sharing with lack of funds, lack of channels for sharing, broken links between researchers and policy makers and weak networks highest on the list. On the positive side, it was found that managers see communication as a priority, infrastructure is not seen as a major problem and there is an awareness of the value of research and knowledge among African institutions.

Gutto (2006, 306) argues that:

'the primary purpose of education, formal or non-formal, is the development of interrelated and interdependent sets of human capacity to think, to know and to act by honing social consciousness or awareness, values and skills. Investment in education is therefore an investment in the

development of social capital that combines with material and other resources and other non-material phenomena to produce goods and services, as well as a favourable spiritual environment for human sustenance and development'.

Africa needs to rethink and reconstruct the approach to education and develops linkages between all levels of education in order to make education relevant and empowering. This requires understanding of the interrelatedness and interdependence of knowledge systems. Creative utilization of ICT can enhance networking and distance learning. Building a new consciousness of global Africa must form part of the agenda of the African Renaissance. (Gutto 2006, 320).

The NEPAD initiative clearly realises that at the root of emancipation, the capacity of self-transformation and the revival of Africa lies a culture of learning and education. On the first level is a continental effort to move away from Western-dominated systems towards interaction among the people and institutions of Africa. On a second level is the recognised need to learn from events in the dynamic global environment. On the lower lever is the acknowledgement of ICT to enable learning. The interactive combination of these three variables supports the proposition that a learning culture enables KM for peace and conflict prevention.

An expert in the UN agreed that any organisation involved in trans-national activities should have the capacity to merge all possible knowledge received from other organisations to create holistic knowledge. Knowledge production must be managed to ensure that it results in decisions and actions that effect positive change. The expert added that KM should include linking pre- and post-colonial African realities to be effective. He reminded that the colonial 'adventure' distorted the flow of social development in as much as it was a test case for the sustainability of some African knowledge systems. The role of scholars today is to break the legacy of colonialism by bridging the 'two Africas', using the most recent inventions of sciences and technology as vehicle.

5.8 THE ROLE OF ICT

Boateng (1999, 389-395) states that most of Africa is free. The next objective is to create uniform production and dissemination infrastructure with the aim to resolve conflicts and socio-economic emancipation. He continues to suggest that Africa must establish and manage its own information dissemination structures. Concrete international information networks must be established, including radio, television and the internet. Industry and policymaking institutions must plug into the 'optic fibre regime'.

The AU Scientific, Technical and Research Commission in Lagos focus on applied research including the development of relevant technologies. It conducts capacity-building programs in areas such as traditional knowledge and other areas of applied science. A database project is ongoing for all research related to Africa, research institutions and researchers in Africa and Diaspora. (Esaayed 2005).

NEPAD (2001, 24) addresses 'Bridging the Digital Divide' by encouraging investment in ICT, stating that ICT is crucial to the knowledge-based economy of the future, and can bring unprecedented advantages to Africa.

- Facilitating the integration of Africa into the new information society, using the cultural diversity of Africa as an advantage is envisaged.
- The monitoring of 'tension spots' to provide early warning for conflict management and enable control of pandemic diseases is foreseen.

In Africa, poor ICT infrastructure, combined with weak policy and regulatory frameworks and limited human resources, has resulted in inadequate access to affordable telephones, broadcasting, computers, and the Internet. Telephone use remains below one line per 100 people. The connection cost in Africa averages 20% of gross domestic production (GDP) per capita, compared with the world average of 9%, and 1 per cent for high-income countries. Africa has been unable to capitalise on ICT as a tool in enhancing livelihoods and creating new business opportunities, and cross-border linkages within the continent and with global markets have been inhibited. However, although many countries in Africa have started ICT policy reforms, service penetration, quality or tariffs have not yet improved. (NEPAD 2001, 25).

According to Mugabe, executive secretary of the NEPAD Science and Technology Forum, the objective is to focus on designing programmes that will reconstruct the science and technology infrastructure beginning with Central Africa (Walgate 2004).

In this regard, the E-readiness of Central Africa is amply illustrated by the following:

- Rwanda has a high-quality digital telephone network but with limited penetration to areas outside the main cities in this small but highly populated country. The Internet has become an effective tool for communication both locally and globally. Journalists also find the Internet a useful tool for communication. E-mail helps a number of journalists defeat government censorship and the Internet has become an important tool for circumventing censorship. It enables the media to carry stories from far places within minutes of deadline. The Internet enabled the International community to get quick information about the situation in Rwanda and this facilitated improved participation. The Internet provided easier and faster communication between the field operations of NGOs in Rwanda and their headquarters in the Western capitals. This too enabled the head offices to monitor what was happening on the ground. The Internet also provides research data for everyone. (Tijsenn, 2005).
- In the DRC there is little connectivity because of poor phone lines. Many people have turned to radio-modems in order to get access. Recovering from an internal war, which has accounted for the low level of development of its telecommunications and other infrastructure the traditional fixed-line network, has deteriorated to almost non-existence. Mobile telephony has experienced growth figures from less than 8 000 subscribers in 1996 to almost three million towards the end of 2005. Wireless technologies also serve as a replacement of the obsolete fixed network infrastructure and public payphones. National teledensity remains extremely low, creating potential for the provision of basic services. There is also strong demand for an Internet service. (Market Research.com, 2005).

When comparing the DRC with other countries in Central Africa the following was found (Docktor, 2004):

	Cameroon	DRC	Gabon
	PC Penetration: Low	PC Penetration: Low	PC Penetration: Low
Level of E-governance	Connectivity: Low	Connectivity:	Connectivity: Medium-low
	E-leadership: Medium	Very Low	E-leadership: Medium-Low
	Information Security: Low	E-leadership: Very Low	Information Security: Low
	E-education in Government: High	Information Security: Low	E-education: Medium-High
	E-climate (efficiency perception): Low	E-education: Low E-climate (efficiency perception): Very Low	E-climate (efficiency perception): Low

Figure 5.3: The E-readiness of Central Africa

Wilson (2005) points out the advantages of broadcast education, but concedes that such programmes can present Ministries of education with a difficult choice. If ample foreign funding is available, they can make effective contributions to well-managed schools. However, in most of Africa there is inadequate funding for basics such as chalk, books, desks and adequately trained teachers. Given such shortages, should Africa invest in expensive broadcast education, internet education or rather meet the basics needs? Wilson agrees with the caution that technology is not a panacea that can fix deep-rooted ills. ICT cannot turn bad development into good development; it can only make good development better.

The question of security against sharing was highlighted during a visit to the AU headquarters in Addis Ababa. A briefing on Operation AFRICAN ENDEAVOUR revealed that the USA had declared existing systems in Africa obsolete with the aim of selling new systems, which have to be declared and will be open for monitoring by the USA. An AFRICAN ENDEAVOUR workshop took place in Pretoria from 17 to 21 July 2006 in Pretoria. The AU sees this as an effort by the USA to use the AU to access IT systems in Africa with a 'war on terrorism' motive and promoting 'technological interoperability', which will include plug-in with US systems.

The short analysis of the state of technology in Africa confirmed the proposition hat technology enables KM activities such as

- research collaboration using email or the internet;
- knowledge-sharing and learning over long distances;
- interaction through visual text;
- collaboration where there is a geographical divide;
- the electronic merging of insights;
- the capturing and processing of oral data to make it tangible and explicit; and
- the physical production and dissemination of knowledge products

It appears that ICT in the Great Lakes region is not sufficiently developed everywhere for stakeholders to capitalise fully on the KM advantages provided by ICT. If compared with the importance of basic needs of people and the importance of other resources needed for survival, there is no comparison, but if the requirement for peace and security and the emancipation, empowerment and development of people are considered and it is found that ICT enables that, it must be accepted as a necessity. However, African leaders must be conscious of the manipulative and pressing nature of the electronic media which is not only informative of Western values that may contradict the higher African value of psychological emancipation, but may also enhance a vertical flow of information from north to south in a new relationship of dominance and exploitation. Moreover, ICT can never be divorced from people but is a dependent variable in correlation to the involvement of intellectual capital in the form of knowledgeable and wise people in the management of knowledge, including technical expertise to manage and operate systems.

5.9 THE NEED TO PROTECT

The OAU has endeavoured to develop a system and model legislation that builds on existing international agreements and the African experience of exploitation and marginalisation. In March 1998 the Scientific, Technical and Research Commission of the Organisation of

African Unity (OAU/STRC) issued a declaration on Community Rights and Access to Biological Resources. The objective of the OAU/STRC was to develop draft model legislation on community rights and access to biological resources to ensure the continuing control by local communities of their natural resources, knowledge and technologies. Subsequently the African Model legislation for the Protection of the Rights of Local Communities, farmers and Breeders, and for the Regulation of Access to Biological Resources has been developed by the OAU. The model legislation recommends to the Member States to enact national legislation, including the following specific objectives (Palamagamba 2003):

- recognize, protect and support the inalienable rights of local communities including farming communities over their biological resources, knowledge and technologies;
- knowledge and technologies subject to the prior informed consent of the State and the concerned local communities;
- promote appropriate mechanisms for a fair and equitable sharing of benefits arising from the use of biological resources, knowledge and technologies;
- ensure effective participation of concerned communities, with a particular focus on women, in making decisions as regards the distribution of benefits which may derive from the use of their biological resources, knowledge and technologies;
- promote and encourage the building of national and grassroots scientific and technological capacity relevant to the conservation and sustainable use of biological resources; and
- to provide appropriate institutional mechanisms for the effective implementation and enforcement of the rights of local communities, including farming communities and breeders, and the conditions to access to biological resources, community knowledge and technologies

NEPAD (2001, 35) guides the protection and effective use of indigenous knowledge, seen as a major dimension of the culture of Africa. Although it is the intention to share this knowledge to the benefit of humankind, NEPAD will pay special attention to the protection and nurturing of indigenous knowledge. Urgent steps will be taken to ensure that indigenous knowledge in Africa is protected through legislation and cooperation with the World Intellectual Property Organisation.

5.10 THE DEVELOPMENT BANK OF SOUTH AFRICA (DBSA)

Against this background the DBSA has become a learning and knowledge-sharing organisation, accumulating knowledge, using it in products, services and processes, enabling the DBSA to increase internal synergy and enhance partnerships with its clients, stakeholders and other external actors. The networking approach was suitably articulated by the proposals of a seminar presented by the Development Bank of South Africa (DBSA) for concrete action from 2005 until 2007: (DBSA, 2005).

- Create a website for the management of knowledge in Africa.
- Compile a paper on the African perspective on KM.
- Mobilise partnerships and stakeholders, including African development banks, regional blocs, and KM expertise.
- Consult with governments, business, knowledge institutions and development institutions in Africa.
- Assess and report on existing knowledge networks.

According to the DBSA, KM consists of three components:

- The creation of knowledge, comprising the gathering, analysis and synthesis of all types of information and data, and the development of new insights that can strengthen the activities, processes or outputs of the organisation.
- The processing of knowledge, from capturing and archiving, to dissemination and finally the development of products and services. Processing, including activities such as skills development, developing internal systems and processes that encourage knowledge creation and dissemination, and encouraging a culture that supports the creation, deployment and use of knowledge.
- The deployment of knowledge is the process of applying knowledge in the organisation to develop products and services to ensure that functional activities support the strategic objectives of the organisation according to its operating principles and imperatives.

The creation, application, and management of knowledge in the DBSA is therefore informed by and organised by knowledge needs. Subsequently a strategy was formulated which includes the following elements:

- A knowledge culture capitalising on the existing knowledge and the enhancement thereof
- A learning organisation involving continuous focused learning that builds the knowledge capital
- Knowledge exchange within the DBSA and between the DBSA and its clients,
 partners, stakeholders and beneficiaries
- Knowledge accounting involving quantification and reconciliation of KM efforts and resources
- Sustained and enhanced knowledge partnership based on the common goal of enhancing development knowledge.

5.11 FINDINGS

The study, using African conflict resolution initiatives as a case study of KM for conflict resolution, revealed that the methods used by African institutions are not adequate to manage knowledge to eradicate the causes of conflict, provide early warning of conflict, or produce a synthetic knowledge product for wise decisions and successful actions. However, the literature alerted the researcher to a few important themes related to the research problem that will serve as focus for field research to learn additional KM principles and practices that could be applied to conflict resolution. The following themes were identified to investigate how knowledge of Africa should be managed to promote positive outcomes for Africa:

Theme 1: The Use of African Knowledge Systems to Prevent Conflict. The indigenous knowledge systems of Africa present KM practices that could be used for conflict prevention and learning. Especially the value system of Ubuntu provides valuable principles to prevent and resolve conflict.

Theme 2: The Finding of Collective Middle Ground (CMG) through KM. In Africa, the collective middle ground between civil society, trans-national organisations and state structures implies the merging of global knowledge with indigenous knowledge in a horizontal power relationship of equal sharing and control, in the spirit of Ubuntu, to find solutions to and prevent conflicts in Africa. Especially the way in which African knowledge systems and knowledge systems from outside the continent develop an equal complementary relationship to resolve conflict, is of vital importance.

Theme 3: A Universal Network of Collective KM. The desired KM situation in Africa is a sphere of interactive networks, chains and formal centres of knowledge linking intellectual and social capital of global, continental structures, regional structures, state structures, civil society, traditional communities (with special emphasis on the empowerment of historically marginalised communities), community organisations and public citizens. The network is founded on the relationship of horizontal power equilibrium in the spirit of an "universal Ubuntu" (see Chapter 4). The purpose is to blend knowledge, to learn from the new blend of indigenous knowledge as a method of self-empowerment to prevent conflict and overcome the other challenges of Africa. This includes equal participation in the dynamic transnational environment to empower and restore the power equilibrium and convergence between the north and the historically marginalised Africa, maintaining the choice to collaborate or not, especially in ventures such as conflict prevention.

Theme 4: Constraints to Collective KM. In Africa, the constraints of collective KM that need to be removed are continued reluctance to share because of exclusive objectives, the notion to protect because of distrust, the persisting vertical power-relationship between major powers and Africa, lack of objectivity in the merging of insights, time management, limitations on enabling capacity and communication (including language differences). These challenges need to be addressed by the intervention of visionary leadership, capable managers and innovative experts, facilitating the timely blending of all resources (human and physical) to prevent conflict or to support longer-term peace plans.

Theme 5: Policy Frameworks, Strategy, Plans and KM. Policy frameworks, strategies, and action plans must be in place to enable KM in both society and business. KM is part of long-term visions such as Ubuntu, the African Renaissance philosophy, medium-term sector strategies of NEPAD and trans-national business, and the operational and business plans of all entities. The management of knowledge for specific programmes is monitored with suitable instruments to ensure timely and wise decisions for action. Consciousness of human rights and security, and conflict prevention, which is the podium for all other ventures that may lead to an African Renaissance, persists. These frameworks must provide for the protection of all knowledge including indigenous knowledge. Instruments must be developed to ensure a realistic trade-off between the responsibility for sharing and protection, ensuring tangible compensation or advantages for African society for participation in collective KM.

Theme 6: Knowledge Production. The ideal knowledge product contains a synthesis of indigenous African knowledge (including information that is the result of tacit knowledge in oral or symbolic format that was processed to be tangible) and tangible knowledge inputs from as many other participants in the network that reflect all possible worldviews. The new holistic product must be subjected to interpretation by a panel of wise people and disseminated to effect timely and defendable decisions and actions to change a situation, e.g. a conflict situation.

Theme 7: A Culture of Learning. In Africa, intellectual capital is developed through a culture of learning and reconstructing the approach to education, which develops wise leaders, capable managers, and facilitators as well as expert knowledge workers who understands the interrelatedness and interdependence of knowledge systems. Relevant learning empowers and enhances trans-disciplinary insight, cultural understanding, knowledge awareness and positive perceptions about others. Intellectual capital includes people who can work together in multi-disciplinary groups, COPs and knowledge centres and the creative utilization of ICT and traditional methods for effective communication to enhance networking, including communication with centres situated on the periphery of states and in historically marginalised communities. People must be able to gather data, process it into explicit information, analyse it and jointly interpret knowledge.

CHAPTER 6: PILOT STUDY IN THE GREAT LAKES REGION

'The road does not enlighten the traveller as to what he may find at his destination'-Congolese Proverb

6.1 INTRODUCTION

The pilot study involved a small-scale but thorough study in the form of preliminary exploration of the universum (the Great Lakes region) to obtain a picture of the real practical situation of the total universum where the main investigation was to take place. The preliminary exploration involved a degree of participant observation in communities of practice as a quasi-member, interviews with selected respondents, identification with keyinformers, and personal interviews with a number of experts. Access to experts was enhanced through e-mail contact and by creating a web-based survey and blogs for experts to participate.

During 2005 and 2006, the scholar spent some time in the DRC, Uganda, Rwanda and Burundi, visited these countries on several occasions, intensely interacting with selected members of the population, physically travelling parts of those countries. The communities of Kinshasa, Kampala, Kigali, Kisangani, Fort Portal, Gulu and Bujumbura were visited. These communities were specifically selected because all the themes identified in Chapter 5 were observable in the specific milieus. Discussions with liaison officers and embassy personnel from several organizations serving in the Great Lakes region involved in peacekeeping and conflict resolution in the DRC, Rwanda and Uganda and technical experts from trans-national organisations based in Kampala, Kinshasa and Kisangani provided valuable planning data.

The pilot study formed an integral part of the research process with the objectives of

- evaluating the research problem and sub-problems;
- determining deficiencies in the conceptual framework and research methodology;
- investigating the feasibility of the study; and
- obtaining a broad but concrete orientation of the field of investigation for the tentative planning of the main investigation

The initial research consisted of preliminary exploration to get an impression of the physical episteme in the Great Lakes region, to find reliable and relevant local literature and to identify suitable sample populations for field research.

6.2 OBSERVATIONS ON TRADITIONAL CONFLICT RESOLUTION PRACTICES

The use of traditional conflict resolution methods to deal with conflict in Uganda was discovered. The rituals of 'Mato Oput' or 'Gomo Tong' ('bending of the spears') involve the values of forgiveness and peace embedded in the culture of central Africa, forming the starting point of conflict resolution among traditional Africans. Once knowledge is shared about the causes of the conflict, the guilty parties confess their transgressions. The communities involved then decide on what compensation is required from the culprits. Once the punishment is accepted, the rituals of Mato Oput or Gomo Tong (among others) take place and the conflict is resolved. The ritual of reconciliation called 'Mato Oput' is based on the belief that humankind is sacred and that blood must not to be spilled without a just cause.

In the traditional justice system of the Acholi, the perpetrators worked through the Council of Clan Elders and the institution of 'gure madit' or Supreme Court that dealt with all criminal and civil cases, made laws, and religious injunctions for members of the Acholi society. Society was governed in accordance with traditional African beliefs, norms and customs. It was on this basis that the traditional systems of conflict management and resolution in the Acholi were organised. Within the traditional community, if one killed another from a different clan, the killing would provoke the anger of God and ancestral spirits.

What also transpired is the use of modern knowledge systems in the form of databases and communication systems in conjunction with traditional conflict-resolution initiatives. These traditions were found to be practised in their purest form by the community of Gulu in Northern Uganda, and especially by the elders of the Acholi with the support and cooperation of most other institutions of the Acholi. Consequently, the community of Gulu was identified as a suitable unit of analysis to research the themes to identify conflict resolution principles and practices.

A similar process was observed during a visit to Rwanda, where the government revived the Gacaca courts system to deal with perpetrators of the 1994 genocide. The traditional courts gather twice a week at community centres where elders were observed attending to the hearing of the accused. The accused has to confess and tell the truth with the aim of reconciliation. Once the hearing is completed all those present decide on suitable punishment. The accused is then forgiven. The data are captured in writing and later onto computers. Several 'genocadaires' were observed serving time in the prisons of Rwanda, sometimes with minimum supervision. The unique way in which knowledge is managed through a combination of traditional and modern systems confirmed that the Gacaca court system a suitable unit for analysis to research all the themes identified.

6.3 OBSERVATIONS ON THE COLLECTIVE MIDDLE GROUND

In Uganda, the functioning of traditional systems in conjunction with modern knowledge systems was observed. For instance, the King of the Batooro is still using the traditional system of consulting elders together with modern Westernized advisors to take decisions on affairs that directly affects the Batooro nation. The belief system of the Batooro nation still includes belief in demi-gods, which are even taught at school. The God concept revolves around a supreme being who is believed to have created all things good and benevolent and unless wrongdoing is committed, cannot harm people. However, the world was full of evildoers, evil spirits, and sorcerers employing negative magic, causing misfortune. The Batooro also believe in mediums, which can be good (agents of God) or bad (agents of the devil) and the Mandwa cult. The Mandwa is worshipped and consulted through a Mufumu (Diviner). It also appeared that these beliefs are still very strong despite the destruction of the traditional system by previous wars and HIV/AIDS in the northern areas of the country. A facilitator confirmed that the God and heaven concept is nature and earth related, and not in the sky as Germanic cultures believe. Consequently, the lives of people like the Batooro are largely influenced by an earthly and natural God.

A valuable case study of how traditional knowledge and modern practices complement each other was discovered at the saltpans on the shores of Lake Edward. The Katwe Salt Mine initiative was started by a Captain Fugard during the nineteenth century. The local community was taught to exploit the salt in the pan, which was created as result of volcanic activity, for commercial purposes. Through the years, the mining project has become a

unique system in which indigeneous knowledge of the local community is used to the benefit of the community itself. Methods used are traditional, but not less sophisticated than modern systems. What is of great value in this case study is the management of indigeneous knowledge at the project. Different experts, available ground, equipment, transportation, and health aspects were coordinated in an efficient fashion without the need for modern technology. However, the lack of modern technology became obvious when the use of bicycles were observed to distribute the salt to users, and a salt processing plant that became dysfunctional during the war: the overseas company processing the salt had to withdraw because of security considerations. In that lies an important lesson for organizations getting involved in any business in African countries. A thorough assessment must be done of current and future conditions in the area of operations, taking in account not only the local opportunities, but also threats from outside. The company never anticipated that the peaceful Lake Edward area could become contaminated by a war started elsewhere through unrelated causes.

In Kinshasa (DRC), the total domination of western knowledge systems was observed. Colonization not only brought modern communications infrastructure but also a European culture and way of thinking. One only has to look at the television channels accessible in Kinshasa to realize the continued influence of European and US information systems, creating what can be described a psychological enslavement to the French European culture. The adoption of a French value system clearly suppressed the wealth of traditional knowledge in the Kinois society.

Unique knowledge is found in the DRC in the form of art, music and the ability to create something out of nothing. The Congolese express themselves through music, mostly in indigeneous language, dancing to a unique rhythm. Together with the fine art of mask making and carvings, it forms a subtle but powerful way of communicating the values of society. The question arises on how this communication can be accessed and interpreted by observers. In this regard, the first issue that comes to mind is the issue of language. To catch the symbolic 'messages' from music and art it is important that the local language is understood, including the subtlety of cultural idiom conveying values. It became obvious that on understanding of the culture is very important.

In the peace process of the DRC, the universal values of peace and forgiveness are alive where the general Congolese society is concerned, but only adhered to by politicians in public forums and actively promoted by international conflict resolution. However, it is the ancient value human beings hold for the glitter of gold and diamonds that is overwhelmingly dominating decision making on DRC issues. During observation of social interaction in Kinshasa, the scholar discovered that wealth creation and the spirit to survive are the highest values for the Congolese.

However, it became clear that the hope for peace and survival is held dearly by the average citizen but the quest for wealth creation on national level turns into greed where the ruling elite and multi-national organizations are involved. Once this fact was recognized the researcher could understand more why in the DRC knowledge systems are dominated by Western initiatives. Formal analyses of the situation by trans-national organisations like MONUC and EUFOR bordered on naivety and a lack of understanding of African realities that are the result of colonization and resource based conflict that destroyed the traditional norms of Congolese society that even continued in the post-colonial era.

During a visit to Burundi, the most prominent aspect observed was the destruction of indigeneous knowledge systems, first by colonialism and later by war. Traditional knowledge in Burundi was suppressed and eventually destroyed to such an extent that Burundians are ashamed of their traditional systems. Most educated Burundians went overseas to the USA and Europe to study and bring back knowledge to the country. The result is that the community of Bujumbura is dominated by Western values, most prominently French values. In Burundi the disparity in development between rural and urban communities are more prominent than in the DRC because of the close proximity of developed and the under developed.

In the area of Ruhengeri in Rwanda the use of indigenous knowledge was observed during a visit to the Vurunga National Park on the border with the DRC and Uganda. The local community bordering the park is closely involved in not only the protection of the unique mountain gorilla population of the park, but also successfully uses their tracking and bush navigation skills to track down guerrilla families to meet the tourists. Successful lodges nearby, points to successful multi-national ventures and a combination of thorough assessments of the risk to establish tourism ventures in an area that is prone to the effects of

cross border wars. Moreover, it indicates the successful use of indigeneous knowledge for development.

During the exploratory research, it became evident that it would be impossible to research all the cases where collectiveness in KM was observed. Although the specific cases provided valuable insights, it proved to be not on the trans-national level. It was judged that transferability of research findings based on these samples to a larger research population would be problematic. Furthermore, expert opinions pointed to other entities as more suitable as research samples that would reflect principles and practices in finding the collective middle ground.

In discussions with experts on the cases of Mrs Thomas Lubanga, Joseph Kony and several others whom are tried by the international court system, it was confirmed that the KM systems of the International Criminal Tribunal in Rwanda (ICTR) would be a suitable sample to investigate the convergence of knowledge in a trans-national organisation. Apart from the fact that both the world views of a trans-national organisation and African society is represented in the ICTR, important values found in the normative domain like justice, human rights, humaneness and forgiveness are considered with evidence from the empirical domain. Furthermore, being a modern system, all themes could be researched within the context of conflict management, including how knowledge is managed collectively in a common ground between IKS and global knowledge systems and how these systems complement each other.

6.4. OBSERVATIONS ON NETWORKS

In the DRC and Burundi, interaction is limited because of ongoing conflict situations, including hostilities in the border area. Although the communities of Bukavu, Uvira and Bujumbura interact with each other, the interaction is cumbersome, unsafe and regularly hampered by border closures. However, diplomatic interaction with other countries in the Great Lakes Region appears to be prominent, mostly because of conflict resolution efforts involving all countries. Diplomatic activity is hampered by energy-sapping and expensive air and road travel between towns and villages in the DRC. Corruption at airports, tracks through the bush and over hilly country, road blocks manned by money seeking 'soldiers' made information gathering an adventure not to be attempted by the faint hearted researcher. The result is incomplete information, leading to over-simplified analysis of the situation

mostly considering historical facts or information available in modern knowledge systems like the Internet.

Significant is the outreach of Uganda to interact with the region. From a reluctant and disorganized neighbour in the DRC, to the formal and bureaucratic MONUC structures, to the regional concurrent Rwanda, and regional allies like SPLA factions, Kenya and Ethiopia, Ugandan diplomats and other officials could be observed travelling all over to resolve regional issues. In Uganda was found a well-developed press in English, not only keeping their citizens well informed, but is also used as a powerful instrument to influence international representatives in the country. The theme of manipulative or propagandistic dissemination of information was identified.

These observations served to confirm viability of the research, especially the choice of universum. Interactive networking for conflict resolution in the Great Lakes region was found to be intensive, in such a way that knowledge may be sufficient to find an African solution to conflict, without relying on a dominant international system.

6.5 OBSERVATIONS ON KNOWLEDGE PRODUCTION

Access to the unique cultural information in Kinshasa was observed in interaction with security companies and embassies in Kinshasa. By employing and building lasting relationships with local employees, they could act as facilitators to understand the expectations of local cultures, beyond the information that was pushed by political propagandists through modern media. Moreover, the classical process of data gathering, including extensive research within the community to identify what security risks should be managed, information processing and risk assessment was observed in different situations, presenting many opportunities for research.

A further lesson learned is also related to the absence of holistic information informal analysis. Information products from MONUC were incomplete because of the limited scope of observation of military observers on the ground. Although probably the best product available, MONUC reports were manipulated to display Western orientated interpretations that showed the UN and MONUC as highly successful trans-national organizations. Analyses from African countries were also incomplete in that the products avoided issues like

a corrupt value system of the DRC and the quest for wealth as highest value. Products from EUFOR were outright showing preference for one specific candidate based on his good French and Western orientation.

However, MONUC had the most reliable sifting and storage facilities. The GIS based system of MONUC proofed to be the most reliant for formal analysis in the DRC. In the case of other countries information had to be sent 'home' for processing and production of new knowledge. At home, the knowledge product often became distorted because of a different perspective of a distant situation, but had the advantage of being more holistic in that global factors were often considered. It was especially in this case that the feel for the normative aspects like community expectations, value systems and emotional issues were not considered, resulting in inaccurate forecasts and failure to warn decision-makers about violent actions based on beliefs, perceptions and emotions.

Furthermore, intensive sharing among foreigners resulted in mostly western dominated picture with a classical divisionary thinking depicting an east-west divide of the country, ignoring commonalties like a general wish for peace, development and the creation of wealth. It was in this context that the value of narratives became apparent. Stories told by village elders, members of civil society, the cautious hotel porter and the newspaper vendor may be of limited value to scientific analysis of information but translates the feeling of the indigeneous of what is important and valuable to them. These information inputs cannot be ignored.

During exploration of knowledge production in the DRC no suitable sample could be found from which new principles and practices for knowledge production could be derived. Subsequently it was decided that the way in which knowledge for conflict resolution is produced in Uganda, and the results of the ICTR and Gacaca activities, would be suitable samples within the context of the conceptual framework.

6.6 OBSERVATIONS ON THE USE OF ICT AND A CULTURE OF LEARNING

Observation of physical infrastructure in 2006, with elections in the DRC, revealed an extensive knowledge infrastructure. The coming of several foreign forces also brought the latest technology like wireless internet, unfortunately also revealing the limitations of such

systems. Software incompatibles, server capacity, etc caused occasional breakdown in systems, frustrating the flow of information.

The elections of 2006 brought observers and knowledge workers from all over the world to the DRC. The basic concept followed by all role players was to deploy observers in as many towns and villages as possible and monitors at all polling stations. Observers and monitors reported their observations to nodal points, mostly based in Kinshasa, through wireless data transfer and sms using cellular and satellite infrastructure. Databases were created by IT personnel to process election results. In Kinshasa institutions like the IEC, MONUC, EUFOR and the embassies of various governments processed the information into written reports. These reports were sent to the governments of countries participating or observing the peace process. Information was shared on Ambassadorial and official level, except when it was classified by the governments involved as confidential or secret. In Kinshasa rival political groupings, including the incumbent government was not so eager to share knowledge, reverting to the dissemination of propaganda and conspiracy theories.

Within context of a the general e-climate it was found that in Kinshasa the internet is becoming more accessible to more people at a more affordable rate and that people are educated and able to use modern knowledge systems. However, the disparity between the capital Kinshasa and the remote Kisangani was prominent, with the latter location severely underdeveloped in terms of basic infrastructure, which cannot support modern knowledge systems. A lack of service providers, no landlines and unreliable electricity supply rendered knowledge sharing reliant on cellular communications, which most of the time only allowed for voice communications and very slow data transfer.

Important lessons learned include the limitation of the use of technology for information gathering and dissemination, especially in an environment of under-developed infrastructure and over reliance on ICT. Power failures and incompatible software disrupted wireless communication frustrating the channelling of information to nodal points. Knowledge workers, especially from countries outside Africa, found the domestic setting intolerable and limited efficient information gathering.

Observations in Uganda revealed that the knowledge infrastructure and general e-climate strongly supports interaction. The people of Southern Uganda become computer literate from

school going age and access to the internet depends on the socio-economic status of the person. The telephone system is reliable and the yellow MTN outlets are observed in even the remotest areas. Wireless internet operated well but disrupted by unexpected power failures.

During a semi-structured interview, a technical expert from MTN explained that the technology infrastructure in Kampala is 97 % reliable. He used the example of the cellular based card system in use among some banks. Cybernet terminals are deployed at several businesses and works well. However, the people of Uganda need to expand their knowledge of technological use. Most people still feel more comfortable with traditional banking systems because of the threat of fraudulent transactions. Less than 35% of the people of Uganda use credit cards. However, the government is very ICT conscious and several policies and strategies are in place to promote an e-climate in the country. Many qualified technicians are available and when MTN advertise technical post, there are more than 1000 applications. Books are available on the subject and the concept of e-books has been implemented at the bigger universities. The development of databases is encouraged. Most high schools have internet access. The company U-Connect plays a major role in this regard. The company launched a project aiming to supply cheap information communication technology to schools. During 1995, U-connect embarked on network training workshops in the region to assist schools acquiring computer skills. The first workshop was held in Tororo for the Eastern region.

It was also travelling and staying in Batooroland that the contrast of modern knowledge systems was experienced. MTN kiosks were clearly visible in every village along the road and all infrastructures were in place required for modern communication systems. Local radio stations supplemented those of Kampala and television brought the outside world to the local community. However, like Kisangani in the neighbouring DRC, Fort Portal appeared neglected by the central government in Kampala. Although clear attempts could be seen to improve infrastructure (according to sources in order to prepare for development after the discovery of oil in the Similiki Valley), Fort Portal was clearly on the periphery of modern knowledge systems.

In Rwanda, a well-developed ICT infrastructure was found. During the time there, Mr Bill Gates visited Rwanda and pledged several million dollars for ICT development in Rwanda,

which will influence health systems throughout central Africa. The willingness of such a prominent multi-national corporation like Microsoft to invest in Rwanda was probably based on an analysis pointing to stability in the region. It is assumed that a positive Peer Review of Rwanda contributed to this conclusion. Furthermore, it may point to a prognosis of a positive outcome of conflict resolution in the DRC and expectation of lasting peace in the Kivus. A visit by Mr Gates to refugee camps situated on the hills east of Lake Kivu and research among the population of Goma, Sake, Masisi and Rutshunga in the border area between the DRC and Rwanda may have led to other conclusions.

Exploring the ICT infrastructure and culture of learning showed that Uganda and Rwanda would be the more viable settings to research the use of ICT in a KM context than the DRC. The way ICT is applied in Uganda and Rwanda combined with a culture of learning proved the most suitable milieu for field research in this regard.

6.7 EVALUATION

Networks of collaboration in the Great Lakes region on the trans-national level implies that nations, societies, or communities of the DRC, Uganda, and Rwanda are parts of interactive networks or chains, interfacing in various ways with each other, sometimes in a collaborative fashion. Interaction is intensive from the level of the local community like Kinshasa, Kampala, Kigali, Kisangani, and Fort Portal to interaction among the governments of the nations involved.

All these places, together with other places like Mbarara, Ruhengeri and Goma were found to be centres of knowledge where many worldviews meet and where knowledge is produced. The blending of traditional and modern knowledge was found in Western Uganda, while modern knowledge systems dominated in places like Kinshasa, where modern knowledge was adopted by local society to such an extent that it became indigenized. What is also prominent are initiatives to self-empowerment in order to participate equally with other partners on regional and global level, employing the wealth of intellectual, spiritual and social capital embedded in the societies of the Great Lakes region.

Participation in the global arena is intense and the major powers of the world is seen to be involved everywhere, especially in the safety and security arena. The supportive nature of

the involvement, sometimes accompanied by risks and sacrifices, were obvious to the observer. The dependence of societies on foreign assistance, especially in Rwanda and the DRC where conflict left its consequences and is still leaving its marks, were just as obvious. Whether this relationship is exploitative needs to be investigated, but leaves a possible answer to be affirmative if vulnerabilities of societies like those in the Eastern DRC, Batooroland and Rwanda is considered.

However, superficial observation did not reveal any oppression of systems, on the contrary, a new freedom to develop infrastructure; including indigenous knowledge, systems were found. Although they are not yet in equilibrium with the rest of the world, countries like Uganda and Rwanda are busy obtaining a leading edge in regional context, realising the advantages of learning from other worldviews, probably because of a history of colonisation and the entrenchment of internationalised values in society. The question remains to what an extent the societies under discussion can exercise the choice to collaborate with powers outside Africa or not, which revealed the vital issue of the need for the development of own indigenous capacity to prevent conflict, ensuring freedom from global manipulation, avoiding isolation and continued marginalisation.

Constraints to collaboration were found to be a main obstacle to build capacity for conflict prevention. There is still a level of distrust and reluctance to share knowledge, especially in the DRC where leadership are restricted by political agendas on what they disseminate to where. An anarchy of political interests resulted in the paralyses of networks, which delivers nothing more than information, which has to be analysed and interpreted again to induce a level of objectivity.

Language was found to be a major constraint to access indigenous knowledge, not only the indigenized knowledge of the DRC (which requires French) but moreover interaction with people in areas away from the knowledge centres of the cities promised to be an obstacle during the main study, despite good interpreters and a acceptable level of English being spoken.

The issue of language and under-developed modern communications is however not the major constraints if compared to the culture of violence which persists and remains an imminent threat not only to members of opposing parties or belligerent groupings, but also to

the unarmed travelling researcher. An episteme marked by a culture of distrust and division to such an extent that it is violent, limits the development of any system, including reliable knowledge systems. Combining this with inadequate physical infrastructure, interaction and collaboration becomes challenging even in the centres of knowledge like Kampala and Kinshasa and arduous between centres like between Kisangani and Kinshasa.

Collaborative networking in the DRC clearly requires regular leadership intervention and capable knowledge managers to facilitate it, while innovative experts are required to 'make things work'. In Uganda and Rwanda, it appears to be already accepted practices. In the end, it was found that the several constraints are not prohibitive of collaborative networking and that the foundations of African knowledge systems are already there for successful KM to prevent conflict and to support longer term planning for projects like NEPAD.

It was found that an African knowledge foundation is already there waiting to be accessed and to be put to use for the emancipation and development of Africa. Because of a history of collaboration and interaction of colonized countries, the African knowledge foundation of the Great Lakes is already a synthesised version of several worldviews, which is difficult to divorce analytically. What specifically transpired is the interpretation capacity, or the lack thereof, needed to understand African knowledge. People with a Western worldview appears to struggle to grasp the meaning of information gathered for instance during the elections in the DRC. The importance of people with insight into the cultural nuances of the conflicting society to interpret information, was highlighted.

A satisfactory knowledge product that reflects a synergy of interpretations from different worldviews could not be found. Those available knowledge products disseminated reflected mostly a Western worldview and represents simplistic dichotomised thinking that presents the risks of repeated wrong decisions and inadequate actions to prevent further conflict in the DRC. It was distressing to learn that the available knowledge products have profound influence in the policy-making of trans-national bodies like the UN and action plans of the UN in the DRC. The few knowledge products that could be seen in Uganda were of higher quality and could be very valuable for decisions on, for instance, resolving the conflict with the LRA in Northern Uganda.

Without scrutinising, it is accepted that some computerised databases of Uganda and Rwanda already contains indigenous knowledge content. The assumption is based on observations made about the speed of transfer of information through cellular phones and the internet between centres of knowledge, the presence of integrated computers systems that links remote communities and the level of IT skills observed. Here the foundation already exists for ICT to enable collaborative networking to prevent conflict. The question remains whether this capacity is used to collect and capture the wealth of knowledge embedded in systems like Gacaca and the traditional knowledge systems of the Acholi.

Another important observation was the skills required by knowledge workers to successfully gather, analyze, and produce new knowledge. Apart from a positive psychological orientation towards finding empirical facts, the knowledge worker also requires a detail understanding of a complex situation. A lack of understanding may result in conspiracy theories and over-simplified dialectic thinking. Furthermore, an intuition of the cultural and normative setting is required to make valid observations. In the case of formal analysis, the knowledge worker had to depart from a research design or set of indicators to be observed. Often the knowledge worker lost focus gathering information that was irrelevant for knowledge production.

It was observed that a culture of learning in all societies in the Great Lakes presents a firm foundation to enable collaborative networking, linking the wealth of social and intellectual already available in the area to create a body of knowledge that reflects the best of all worlds. The indications are that learning takes place beyond structures and borders, including outside Africa. The need to learn with an open mind is recognised and the management and research skills are developing day by day, empowering the people of Africa to blend different worldviews, including their own, to produce a body of knowledge that would reflect an understanding of modern African dynamics and that would contribute to the eradication of the anthropology of violence.

6.8 FINDINGS

The pilot study successfully served the purpose of testing the conceptual framework for analysis, finding it to be an all-encompassing framework suitable for the study of the whole spectrum of KM activities in the Africa. The pilot study showed that the conceptual

framework is suitable to guide collection of sufficient qualitative data through a combination of research methods to focus on the knowledge dimensions of unresolved conflicts in the Great Lakes region, in cooperation with leaders, managers, and experts who represents different worldviews. It was determined that the collected data would be suitable for interpretation through abductive logic reasoning to learn from diverse worldviews on what the principles and practices of indigenous knowledge in Africa should be. Furthermore, the pilot study confirmed that the selected units of analysis and samples would reveal sufficient criteria for the evaluation of existing models and the development of a new congruent model for KM by trans-national organisations and African society collectively.

Finally it was found that an exclusive body of traditional knowledge exists which not only survived the influences of modern knowledge systems, but absorbed the norms of especially Western society to form a unique indigenous knowledge system. Today the indigenous knowledge in the Great Lakes region is used for conflict resolution and reconciliation through the practices like the Gacaca court system and the traditional conflict resolution system of the Acholi in Northern Uganda. However, potential dominance of global systems is still observed in the form of trans-national organisations like the ICTR, enforcing universal value systems like justice and human rights. These findings support the decision to choose these entities as samples for the main study, rendering not only the study viable and orientated the researcher, but also showed that the research problem could be answered within the conceptual framework, using the chosen methodology.

The pilot study confirmed that the communities of Gulu, the Gacaca Court System as managed in Kigali and the ICTR in Arusha are suitable units for analysis that would contain a cohort of experts, participants, and managers that would reveal the principles and practices of collective knowledge management for conflict resolution, suitable for learning and creating a new model.

In terms of practical considerations, the pilot study ensured a broad but real orientation to make planning of the main investigation possible and shown execution of the main study to be feasible. Access to the area where fieldwork was to be done (Gulu, Kigali, and Arusha) was cumbersome because of distance and costs, but in the end, the exploration showed that the benefits of discovering new knowledge are outweighing the challenges. Other

considerations like safety and language also rendered field research the specific communities more viable than in the DRC and Burundi.

The pilot study proved to be vital for the research process because it showed that field research in the specific universum is viable and necessary to answer the research problem and sub-problems. Field research would determine how the philosophies and theories on knowledge, knowledge in Africa and KM manifest itself in African society. Furthermore, field research could also reveal new principles and practices on how the knowledge of Africa should be managed by trans-national organisations to ensure effective decisions and actions to achieve the African Renaissance vision as part of a global learning economy.

A possible solution that emerged was if traditional knowledge in Africa on how to prevent and resolve conflict, is synthesised with other knowledge in Africa and the global world, the new knowledge produced in the collective middle ground knowledge will contribute to prevention of conflict in Africa. The IKS of Africa could be complementary to views from outside the continent and perspectives that are significantly different and unique to Africa, such as the quest for emancipation from oppression and empowerment of African society that could be merged with the universal views on justice and human rights. The challenge however is to balance the current domination of Western views with the wealth of knowledge on traditional conflict resolution in Africa and to find common ground where different worldviews would converge on how to prevent and resolve conflict in Africa.

Therefore, it was found that focussing on the subject 'collective KM for conflict resolution' would discover concepts for a new paradigm and model that would eventually evaluate the hypothesis and answer the research problem. The varied propositions of the conceptual framework are thus narrowed down into a 'working hypothesis' with specific KM themes, to be handled in depth during the main study. When the theoretical dimensions and levels revealed by the philosophy and theory of KM is considered, six different but interactive realms of KM can be identified based on the specific themes.

The Traditional African Knowledge Realm. On this level the traditional knowledge of Africa, including the knowledge embedded in collective memory and articulated in African language narrative is accessed in a spirit of Ubuntu (see Chapter 3) to gather data on how to prevent or resolve violent conflict.

- The Indigenous Knowledge Realm. In this realm the unique tacit or explicit normative knowledge and scientific/empirical knowledge claims embedded in the political, religious and traditional African society, including the universal knowledge claims that originates from outside Africa and became indigenised in African society is gathered and processed in a central point with new knowledge for decisions and actions as an output.
- The Collective KM Realm. This realm involves the finding of collective middle ground (CMG) where the indigenous knowledge claims of Africa and the knowledge claims of entities outside Africa (sometimes represented by the trans-national organisation) complement each other equally in a formal and informal way, through the implementation of good KM practices and the norms embedded in Ubuntu.
- The Knowledge Production Realm. In this realm a synthesis of tacit wisdom and tangible, renewable, knowledge with a holistic perspective emerges that provides vision of the future, including early warning of incidents that might occur in the short term, like a specific battle or genocide, or in the long-term, like probability of conflict in and among societies.
- The Social Capital Realm. In this realm social capital in the form of intricate transnational and intra-societal networks of individuals and knowledge centres intra-act in a supportive dynamic trans-realm where knowledge is shared and renewed in a horizontal relationship, continuously seeking new synthesis and holistic perspective of the causes, development and consequences of conflict and opportunities to prevent or resolve it.
- The Renaissance Realm. It is in this realm that policies are determined, realistic strategies are formulated and implementation plans are formalised to energise all involved to intervene to prevent conflict, arrest the cycle of violence or to manage the consequences. It is where the totality of knowledge serves to eradicate the causes and consequences of conflict through empowerment, emancipation, and restoring of imbalances in Africa society as well as the equilibrium between society and the global economy, meeting the expectations of both African society and transnational shareholders, enhancing the competitiveness of both.

The realms are enabled by the following drivers:

- Intellectual capital in the form of visionary leaders, competitive managers and facilitators, expert knowledge workers (including ICT experts) with transdisciplinary insight, knowledge and cultural awareness who work together in multicultural working groups or communities of practice to share worldviews and learn from each other. The quality of intellectual capital depends on a culture of learning, and the empowerment of Africans to participate equally in the production of new knowledge.
- Create knowledge awareness in society and the organisations involved in society, through the implementation of policies, strategies, plans, and suitable structuring to intra-act in all realms.
- Effective communications among individuals and among organisations through traditional practices like Ubuntu or modern KM methods must be developed and maintained.
- Adjustment of political agendas and strategic imperatives to promote collectiveness and the finding of middle ground among conflicting parties.

As a result, of the pilot study, a 'trans-dimensional KM paradigm' emerges that involves collective management of knowledge by intellectual capital from the African village, the broader African community, trans-national organisations, and the global knowledge network. The concept of collective knowledge centres was detected in the middle ground where knowledge is produced, renewed, and sent on to the next entity in a controlled way. The paradigm can be illustrated as follows:



Figure 6.1: The trans-dimensional knowledge management paradigm

CHAPTER 7: KM FOR CONFLICT RESOLUTION IN NORTHERN UGANDA

'There can be no healing without peace; there can be no peace without justice; and there can be no justice without respect for human rights and rule of law' - Kofi Anan

7.1 INTRODUCTION

The literature study and exploratory observation in the Great Lakes region indicated that if traditional African knowledge on how to prevent and resolve conflict were merged with other knowledge in Africa, a new knowledge in the CMG would contribute to prevention of conflict in Africa. The challenge was in identifying the principles and practices for KM in the CMG.

The indictment of rebel leaders by the International Criminal Court (ICC) in October 2005 has focussed attention on the balance between justice and peaceful resolution of conflicts. The government of Uganda implemented strategies involving non-indicted commanders, reverting to the promise of demobilisation and reintegration packages. National debate in Uganda has also focused on the need for a Truth Commission, recognising the limitations of ICC indictments to promote the national reconciliation process. Many parties and observers suggested that the Acholi must forgive the LRA fighters without requiring compensation, for the sake of peace and reconciliation. Another view is that this would not be applying justice, which leaves as the only other option the prosecution of perpetrators by local and international courts. Members of the LRA themselves are open to traditional reconciliation, and are supported in this by Acholi religious leaders with logistical support from the Ugandan government. Since 2006, it has presented a window of opportunity for the resolution of the conflict in Uganda, despite a deadlock in negotiations mediated by Mr Rich Machar from Southern Sudan, supported by African and other global role-players.

The purpose of this chapter is therefore to report on a field study performed in Uganda by the candidate during 2006. The report includes the findings of content analysis of literature published by knowledge practitioners in Uganda, the results of interpretative interaction with practitioners, field research reports (FRRs) of semi-structured interviews with key informers and focus group discussions. The epistemological principles of traditional conflict resolution practices of the Acholi in Northern Uganda are identified.

7.2 TRADITIONAL PRACTICES OF THE ACHOLI

According to a key informer (FRR1), Acholi society can be divided in the following 'communities'

- the Kampala-based Acholi
- the modern ('computerised') Acholi
- the Acholi of Gulu
- the camp Acholi (those who were confined to 'protected villages' because of the war); and
- the bush Acholi, who maintain their own thinking

It is in the last grouping where the main problem is situated. Most children born in captivity maintain a mixed value system, interpreting the Old Testament in a unique way to justify violence. The children also learned to 'reason with their muscles'. Furthermore, the conduct of the LRA against their own must be seen against a history of Arab slave trade, atrocities committed against the Acholi during the regime of the late Amin (which some saw as Islam related) and the north-south divide in Uganda that was instituted during the colonial period. Some disgruntled elements in the north maintain hate for Islam and retaliated against Muslims after the National Resistance Movement (NRM) overthrew the national army of Amin. Subsequently many of Amin's soldiers went to the forest as disgruntled rebels. Furthermore, many Acholi youth also had to survive in a negative economic situation and many joined armed groups in order to survive. Moreover, during the Cold War, guerrilla tactics were introduced, including the practice of killing one's own family despite it being a serious taboo in Acholi society. This practice was reinforced through training by religious radicals in Muslim countries such as Sudan and Libya, which teaches that unbelievers should be killed for 'sinning'.

The spiritual dimension of the conflict became apparent when the late Alice Lakema advocated the idea that she was inspired by the Holy Spirit to conduct the war, an idea that was continued by Joseph Kony after her defeat. A key informer confirmed that the LRA used the Ten Commandments of the Bible as the main source of decision-making. Abducted Acholi children developed a conviction, through indoctrination, that Kony was guided by the Holy Spirit ('Tipu Maleng'). Investigations by the elders proved otherwise.

According to his close family and clan members, he possessed no special spiritual powers while he was part of normal society. His 'spiritual' condition is therefore not a result of socialisation, but possibly a mental disorder, a disorder that inspired him to kill violently. The suspicion has also been confirmed that he was influenced by 'quiet training' elsewhere beyond the borders of Uganda or the Sudan, by people who saw his way of thinking as useful during the Cold War. The elders, who are held in high esteem by most people and who listen to their voice and see them as protectors of the people face the challenges of finding the truth and to reconcile the community. However, there are still people outside the community who seeks their own power and challenge the elders. Pentecostal churches also reject tradition and sees it as 'satanic'. (FRR1)

Literature supplied by the Caritas Gulu Archdiocese Psychosocial Support Programme (2005) describes the traditional knowledge claims of the Acholi. Before colonialism, each clan of the Acholi tribe had a royal family. The 'Rwot Moo' (anointed chief), was leader of the clan and selected from among the sons of the royal family. Sub-clans did not have royal families, but respected elders who were leaders as long as they ruled people wisely through consent and with the support of the community. Administrative chiefs were appointed by the colonial powers, selected according to political and educational criteria. Despite this erosion of the traditional leadership, during 2000 many traditional chiefs were reinstated with the intent of empowering them to give guidance to attain peace and reconciliation within and between communities in Acholi and Uganda as a whole. Subsequently the reinstated traditional leaders set up an Acholi Traditional Leaders Council with David Onen Acana II as the paramount chief ('Ker Kwaro Acholi'). Subordinate to the paramount chief are two chiefs representing the Gulu and Kitgum/Pader areas. Apart from the chiefs, the council consists of about 20 members including elders, and representatives of youth groups. The council is responsible for representing traditional Acholi leaders and playing an important role in cultural affairs. The paramount chief asserts that the ancestral myth of the quarrel and the consequent separation of central values of the Acholi such as 'Labongo' (forgiveness) and 'Gipir' (reconciliation).

In traditional society, the Acholi court system was organised at different levels.

• The head of the family handled petty cases in what could be called a family court.

- Elders presided over cases to settle disputes between brothers and neighbours in a clan court.
- Disputes and conflicts between different clans were settled in a community court.
- Conflicts involving different communities were addressed by inter-community courts.

Each clan had a council of elders called 'Ludito Kaka' who met at specific places to discuss, investigate, and judge cases. The institution of 'Gure Madit' was the Supreme Court, and tried cases of both criminal and civil nature. It made laws in the form of religious injunctions for observance and implementation by members of the Acholi society for their own good. The system was therefore based on religion and all public figures were religiously devout and governed their society strictly in accordance with their beliefs, norms and customs. They never developed law-enforcing institutions such as the police forces and prisons service but no person could commit a crime and go unpunished. The community believed that if one man killed another man from a different clan, the killing would provoke the anger of deities and ancestral spirits of the victim. It was on this basis that the traditional systems of conflict management and resolution were organised. The ritual of reconciliation called 'Mato Oput' was based on the belief that humankind is a sacred being whose blood ought not to be spilled without a just cause. (Nabudere 2006a, 14).

Pacere (FRR10) commented that in African tradition to make a mistake could not be privatized. It is the responsibility of the community. In the traditional society, just two clans are involved: the clan of the killer and the family of the victim. During the trial, the killer has nothing to say. Only the families will deal and discuss the issue. In other words, the family takes the place of the lawyer and the defence counsel. They discuss and develop an understanding of what happened. The family is held responsible for what happened, being responsible for the education of the person. In the western tradition, a person must go to jail. In traditional society, jail is not applicable. The family is responsible for compensation and the applicable method of compensation (girls, goats, money). This practice becomes complicated when it is related to modern rules, such as human rights. In modern society, if a person dies the community he comes from is out of the picture. The killer becomes a state responsibility.

The following process of traditional Acholi conflict resolution and reconciliation is identified during field research. (FRR1 and FRR2).

- Conflict Prevention. Forms of behaviour that are likely to lead to conflict are identified and discouraged. 'Kir' (taboo) is a fundamental concept regarding Acholi conflict prevention and resolution. Behaviour that constitutes 'kir' in the Acholi culture in relation to conflict prevention includes violence, quarrelling, cursing, sexual taboos and not admitting wrongdoing.
- Conflict Identification. When serious conflict is identified in the community, the two parties involved suspend their relationships until the conflict is resolved. If a murder has been committed, it is reported to the local representative of the 'Rwot Moo' by relatives of the deceased or the killer.
- Initial Investigation and Mediation. An experienced elder holds separate talks with each of the conflicting parties. In the case of a murder, the representative of the 'Rwot Moo' sits together with his council to examine the circumstances of the killing. In case of conflict between two Acholi clans, the chief will call the elders of the two clans to meet at the border and discuss the reasons for the fighting among them. A period of shuttle diplomacy then occurs, during which elders establish the facts based on evidence provided by witnesses on both sides of the dispute.
- Agreeing by the Conflicting Entities to Meet. Discourse takes place between representatives of the conflicting parties to determine the causes and nature of the conflict, with the assistance of experienced elders. In the case of inter-tribal conflict, the elders of the two tribes enter into discussions.
- Confession and Revealing of the Truth. The acceptance of guilt by the offender is a fundamental principle in the Acholi culture and court system. Somebody who committed a murder outside the village must confess at the entrance of the village that he had killed the person. Transgressors confess, accept, and reveal the truth about the conflict. Thorough questioning takes place by the elders to gauge the truth and ensure the element of remorse. The life pattern and behaviour of the person are closely observed. The 'Ajwaka' (Diviner) plays an important role during information

gathering, together with the extended families of both the clan of the killer and the clan of the affected taking responsibility. The immediate family and blood relations are both the source and the centre of knowledge, passed on through oral tradition and ritual and cultural activities such as dance, song, and story telling, especially around the fireplace. There is a very deep belief in traditional method among all Acholi. In the case of inter-group conflict, after coming to an agreement to stop the fighting, the elders would appeal to their people to cease hostilities. After the confession procedures of investigation, mediation and conflict resolution could start.

- Agreement on Compensation. In the traditional Acholi system, there was no death sentence or removal of offenders from the community. The Acholi followed a system of compensation that had to be paid for crimes committed. Entities agreed on a compensation rate after the offenders had accepted responsibility for causing the conflict. Clans have unwritten by-laws that generally determined the amount of compensation. Compensation was determined by the severity and the circumstances of the crime. The responsible clan raise compensation as a means of punishment and replacement of damage and the life that had been lost. Reconciliation began with the acceptance of responsibility by the offender and the offender's community for the murder committed, including their readiness and ability to pay compensation. The whole clan of the offender was expected to contribute to the compensation and conflict resolution was a collective responsibility involving the whole family/clan. The court had no power to force a suspected offender to accept guilt or pay compensation and when he refused, appealed to the 'living dead' to take revenge in the form of misfortune, nightmares, hallucinations or illness of the offender or his family. Stress would in the long run force the transgressor to confess and pay compensation.
- Compensation and Reconciliation Ceremony. Paying compensation might involve a ceremony symbolising the end of the conflict and restoration of good relations. A policy document 'Cik Tekwaro' was compiled by the elders as a guideline for ritual and compensation. Many clans have lost their full knowledge of ritual and have to be guided by the elders. Ritual will enable the former abductees and other guerrillas to integrate into society. Ritual also enables cleansing of the clan that stands guilty of the killing. The clan is excluded from social interaction and remains isolated until

the desired rituals are completed. It is also believed that if there is not full disclosure, the killer together with his family will remains haunted and the truth will surface through negative consequences for the family and clan.

The key informer (FRR 1) confirmed that 'Mato Oput' is just a ritual that marks the end of a long process of mediation, negotiation, and reconciliation. The ritual is aimed at alleviating the mental and psychological effects of war. The ceremony of 'Mato Oput' is used when a premeditated killing took place. 'Mato Oput' means drinking 'oput' which is a bitter drink made from smashed roots of a tree and shared at the zenith of the ceremony aimed at re-establishing good relationships among the parties (families or clans) who had been involved in the killing. It addresses the spiritual dimension or psychosocial healing. On the day of the reconciliation ceremony, the Rwot Moo and his representatives gather with representatives of the two clans that were directly involved in the murder to attend the ceremony and to share food in the presence of the ancestral living-dead and the creator. (FRR1)

In a 2005 study on traditional justice and reintegration, elders in Acholi expressed the opinion that there was little sense in pursuing 'Mato Oput' on a case-by-case basis because too many people had been killed, and that it was difficult to trace who had killed whom. Other technical issues to be resolved are who would 'Mato Oput' with whom, who would shuttle diplomacy work and who would agree on who did what to whom. More complicated is the question of compensation. It is unlikely that each commander's clan could pay the amounts required. If 'Mato Oput' is only applicable to murder cases, what of rape, sexual and gender-based violence, abduction and forced recruitment of children into armed service, mutilation and mass looting, arson and destruction of property? While cultural by-laws exist to address some of these crimes, they do not extend to extra-ordinary crimes encountered during the conflict. Moreover, each crime generally requires a unique reconciliation ceremony. (Liu Institute for Global Issues, 2006).

Ceremony can also involve 'Gomo Tong' ('the bending of spears') to mark the end of a war or bloody conflict between different clans or communities. It implies evoking the living dead by both sides, which undertake that such killings will not be repeated. Each clan bends its spear and gives it to the other clan in a symbolic act. It symbolises that if any clan should go to war with the other clan without a very good reason, the tip of the spear

would turn back against the aggressor. If conflicts had occurred between neighbouring nations, 'Gomo Tong' was performed without 'Mato Oput'. On the day of 'Gomo Tong', the elders discuss how to ensure that further conflicts and killings can be avoided. 'Gomo Tong' is then performed as a vow not to repeat such killings. Finally, the two tribes slaughter a bull for the elders to eat and then disperse. The elders are of the opinion that 'Gomo Tong' would be more appropriate because of the wide scope of the conflict. It was successfully performed two years ago after conflict between the Acholi and Madi, which resulted in reconciliation. (FRR 2).

According to a comprehensive study on the traditional ways of coping in Acholi by Harlacher et al (2006, 121) 'Gomo Tong' could be applied to mark the symbolic end to the current conflict and to promote peace and reconciliation. The ceremony could not only be applicable in fostering processes of reconciliation within Acholi, but also with neighbouring ethnic groups and perhaps even the current government. However, it is important to note that the processes preceding the ritual, as well as the ritual itself, are integrated. Therefore, the ritual does not resolve the conflict, but a combination of ritual combined with essential procedures prepares for a successful ritual. Harlacher are of the opinion that although traditional rituals engage participants in powerful symbolic acts and offer other effective methods of change as described above, they are unlikely to do magic in themselves. Most importantly, many rituals derive a great deal of their positive impact from the preliminary processes that people engage in preceding the ritual. Thus, it is important that the community, not the funding or supporting agency, be in charge of the process leading to the rituals. Furthermore, the importance of the beliefs and attitudes of the parties involved are crucial in any healing process. Elders emphasise that nobody should be pushed or forced to engage in traditional ritual. Forced participation in ritual is highly unlikely to have a positive outcome. A person who does not believe in traditional values (or the particular ritual in question) will not be able to engage in the process fully.

7.3. THE INDIGENOUS KNOWLEDGE SYSTEM OF GULU

In the context of continued conflict, internal displacement and extreme poverty and in the absence of a functioning legal, social and medical welfare system, the Acholi approaches to address the current circumstances has been recognised by local stakeholders. This includes parties such as the amnesty commissioner, regional peace initiatives such as

district peace and reconciliation teams, the Acholi Religious Leaders' Peace Initiative (ARLPI), traditional leaders and civil society.

According to Harlacher et al (2006, 129) a variety of different options need to be available to cater for the variety of needs of the people who seek help and healing. Traditional approaches should be seen as one avenue of help and healing among others, rather than being used as an argument to disqualify other potentially helpful approaches. The question of which methods to promote should always be answered on the basis of sound empirical evidence and analysis, open-mindedness and inclusiveness when considering different ways to help and heal troubled and suffering people rather than discussion driven by ideological assumptions.

Harlacher et al asserts that the wisdom is in acknowledging the positive potential of traditional rituals and beliefs, not as contradictory or competing approaches with others but as complementary to them. To ignore or discard traditional ways of coping and healing makes no sense; but neither can these ways provide the cure to all ills. The challenge is to understand and use all the different approaches to healing in ways that complement one another with synergy. Thus, traditional means that promote reconciliation and healing can be drawn upon alongside the contributions of Christian and other religious beliefs, Western psychotherapy, modern courts, as well as other tools such as truth and reconciliation commissions, reparations, and memorials. This is important not only in the context of continuing war and displacement, but also once the war has ended and long and difficult processes of resettlement, reintegration, and reestablishment of sustainable livelihoods take shape in a complex and always changing Acholi society and culture.

Many have begun to turn to cultural practices to supplement the Amnesty Act. From its point of view, the Roman Catholic Church has historically recommended 'Mato Oput' rituals. Such mutual involvement helps to heal the denigration of traditional institutions by the churches in the past. The conflict in Northern Uganda has combined both traditional and religious dimensions. Religious leaders, such as those in ARLPI, have been openly supportive of traditional justice practices to promote forgiveness and reconciliation. The Amnesty Commission and NGOs have been supportive of cultural approaches in public discourse and by facilitating or attending communal ceremonies. However, more is required to build social trust and the confidence of individuals in a communal approach

before these rituals can be influential or effective. A number of stakeholders working in the north have already recognised this, and have been working to promote a form of reconciliation that incorporates aspects of Acholi culture. This requires additional reflection, consensus building and significant strengthening. (FRR3).

The key informer confirmed that the ARLPI, joining four denominations, is engaging the whole of society, including the traditional leaders. Religious leaders attend the traditional rituals as observers when the rebels are welcomed back. The heads of Islam, the Catholic Church, the Anglican Church, and the Orthodox Church decided to work together towards peace in Acholiland. Since 1997, this initiative is supported by the government of Uganda and was formalised in 1998. The approach is collaborative, also involving the elders of the traditional Community. Activities include peace marches, joint prayer sessions, joint workshops and sensitisation programmes within the communities, advocating reconciliation and addressing internally displaced people (IDPs) in the camps. The ARLPI consults with both the Ugandan government and the LRA to find lasting solutions to the conflict. Religious leaders visited the LRA in the Garamba National Park (guerrilla base area of the LRA in the DRC), after travelling there via Juba by road and on foot.

During a conference on approaches to post-conflict development, Northern Ugandan representatives were briefed on the potential for conflict transformation through the maximal use of structures, strengths, traditional and social mechanisms. It was the view of the speaker that the devastated region could only be reconstructed through a well-planned, holistic and sustained effort. He argued that the communities had to play a central role in planning, implementation and monitoring of development interventions targeting the community. The speaker described several structures in society that should be involved. (FRR25).

- The Traditional System. In the last five years, Ker Kwaro Acholi (KKA) has been consolidating its structures. Over 50 clans are headed by a paramount chief, Rwot David Onen Achana II. Despite the authority of the various cultural leaders being undermined by inability to assist their subjects during the conflict, they have shown authority in dealing with the formally abducted returnees and the Juba peace process.
- <u>Camps Internally Displaced Persons (IDPs)</u>. The most prominent structure to emerge in the camp was the structure headed by the camp leader or commandant. In

- some camps, the lower structures (the zones) are based on the traditional Rwodi Kweri (zonal leaders). The camp leaders are normally elected by consensus. The structure is known for its effectiveness in mobilisation.
- <u>Local Government Structures</u>. Local government structures have remained intact though functionality is limited; they continue to be a mechanism for concerted efforts of civil society and the district local government.
- The Community Service Organisation Outreach Structure. The NGO sector in Gulu is dynamic and has maintained a strong presence around IDPs, where it builds capacity through training and development and advocacy skills. A number of NGOs, in the course of their project implementation, created useful outreach structures. The structures are ordinarily based on identified resource persons in the project areas. In all cases, such identified person are trained in specific skills, to pass these on to other members of the communities. Examples are paralegals trained by Human Rights Focus, contact farmers trained by Gulu District Farmers Association in Gulu and Amuru districts, CVCs by World Vision and community monitors by a partner organisation of the Gulu NGO forum.
- Religious Structures. The major denominations, namely the Anglican and the Catholic Churches, have structures that are dependable, from the diocese to the households. This structure was interrupted by the conflict but has full potential for recovery.
- Political Party Structures. The return to a multiparty political dispensation has created the potential for multiplicity of political structures. While few of the most important parties have grassroots structures, the return of people is likely to favour the development of structures. In terms of mobilisation, civic education and nation building, participatory decision-making, sharing information and generating debate, accountability and transparency, these structures cannot be ignored.
- The Clan Structure. Despite interruptions caused by the conflict, the clan system has largely survived, though several clans have been divided and displaced in different locations. With the pending return of people clan meetings are organised. An already perceived threat against land is quickly bringing members of various clans together.

All the structures outlined above must play an active role, supporting one another in an integrated manner. A coordination mechanism should be put in place to create space for

youth in informed decision-making, access to land, education and training to reduce the effect of the crisis. The general effects of the conflict must be mapped and fully understood in order to develop an appropriate mode of reconstruction intervention. Programmes to add value to youth empowerment should focus on youth participation in planning, implementation and monitoring to ensured horizontal multiplier effect. A tool needs to be developed to make the reconstruction empowering, informative and mutual between the planners, deliverers and the recipients, involving the local community in refining existing plans and seeking active and productive participation in the plans yet to be developed. All commitments must be well understood and monitored by the recipients using participatory approaches. The comprehensiveness of the reconstruction is what will amount to conflict transformation and a real return of peace, bringing to balance the notion that peace is not merely the silence of the gun.

According to another key informer (FRR7), in more than 20 years no Western conflict resolution effort could end the conflict in Acholi. Furthermore, no effort by religious institutions could end the war. Religious practices were actually one of the major causes of the war. Currently several research institutions and NGOs (local and foreign) are involved in conflict resolution in Gulu. The Gulu NGO Forum was formed in 2001 with the aim of coordinating all these community-based organisations in Gulu. They are required to register with the NGO Forum in Gulu, which is headed by a resident Commissioner. All assistance is accepted and it is trusted that all participants are there for the benefit of the Acholi. However, people coming to Gulu learn more from the people of Gulu about conflict resolution that the people learn from NGOs. The Forum has become a collective effort to effect policy changes, representing the common voice of society, seeking to fill the gap between local understanding and the understanding of the government in Kampala through assistance in the feeding of information from local to national level. workshops are held to support the Justice and Reconciliation programme and formal backing is provided during the peace talks in Juba. The Forum is also assisting in filling a skills gap and the coordinated spreading of services in peace building and conflict management. It also assisted international NGOs that felt vulnerable because the MoUs they had with the Ugandan government limited their activities. The Forum stands midway between the UN organisations and the local community. Three inter-dependant information hubs can be identified in Acholi

the Gulu NGO Forum;

- the UN Humanitarian Action (UNCHAO), which coordinates UN activities in Uganda; and
- the District Disaster Management Committee (DDMC) from government forming the third hub

The relationship between the three hubs is managed by a contact group. Unnecessary joint meetings are avoided to allow for the processing of data and for organisations to perform their actions. Otherwise, there is a reliance on written correspondence or emergency ad hoc meetings. The DDMC meets every second Wednesday of the month according to a specific calendar to share information. The key informer is of the opinion that the Forum succeeds in maintaining equilibrium between foreign knowledge inputs and local knowledge. The power of the forum lies in strong local organisation. Everyone is seen as an equal partner. (FRR7).

A key informer identified the radio station Mega FM in Gulu as an information hub where analysis of information takes place. The purpose of the radio station is to inform the community of progress about the peace and reconciliation process in Northern Uganda. The 'centre' consists of 40 permanent staff with non-permanent 'shadow' reporters throughout the community. Through the deployment of this network the perspective of the population, which is characterized by low literacy, a balance can be established between what is reported by modern media and the view of local people. The station reaches as far as Southern Sudan, the West Nile province of Uganda and the Northeastern DRC, including Garamba National Park, the base-area of the LRA. Radio streaming on the Internet is planned to reach an international audience. The station is a joint community and government initiative to ensure the quick movement of ideas. At this stage, it succeeds in activating opinion and feedback from the community, which serves as valuable decisionmaking information. For instance, the LRA is using the station, through members of the community, to get messages to the government in connection with the resolution of the This 'bounce back' influences policy decisions, for example a change in conflict. government view from seeing the LRA as terrorists to an understanding of the feelings of the Acholi society in the matter. The station is therefore supportive of national security and peace initiatives. The information from the station is only transcribed in text if it is required by people with particular interests, for instance local NGOs and official institutions. In such a specific case, summaries are made in the language required by the client. The availability of sufficient experts remains the main constraint. Furthermore, logistical constraints such as vehicles prevent them from reacting quickly enough on tip-offs. (FRR5).

According to a key informer (FRR6), the *Amnesty Law of 2001* enacted the Amnesty Committee of Uganda. A High Court Judge is assisted by eight regional commissioners to enforce the Law. Each regional Commissioner is assisted by a district resettlement team. The premise from which amnesty departs is forgiveness for the rebellion based on voluntary surrender or rescue by the armed forces of Uganda. All abductees are regarded as innocent and will be pardoned by the community. It is assumed that children who committed atrocities did it against their will. To get this message to the LRA pamphlets were distributed by a Ugandan Peoples Defence Force (UPDF) helicopter. Eight thousand people have been processed since the *Amnesty Law* was implemented.

According to the key-informer, on arrival in Gulu, the returnees are screened and counselled with the aim of restoring trust and confidence. Most of the returnees are still children; therefore, the Child Protection Unit is closely involved. After screening, they are transferred to reception centres where intensive counselling takes place. Several institutions get involved, e.g. traditional cultural and religious organisations. The approach to deal with the healing process is therefore a combination of cultural, religious, and professional expertise, involving dances, drama, and prayer in order to effect emotional healing. The process takes place in close cooperation with the Paramount Chief who represents the traditional system. A cleansing ritual is part of the healing process and is led by the Paramount Chief himself to welcome people back into the community. Once the process is over, the returnee is given an amnesty certificate. All information obtained in the screening centre is captured according to a questionnaire, and the data are placed on a computerised database. Original manuscripts are kept in a filing system. Information was shared among the abductees while they were in the forest and from that, data could be obtained on the whereabouts and activities of other abductees. Once there is peace, the stored data may be used for legal action against individuals who committed atrocities. (FRR 6)

7.4 THE SOCIAL CAPITAL OF ACHOLILAND

A key informer suggests that the insurgency conducted by Kony was not blessed by the Acholi, despite Kony advocating that he rebelled for the sake of the Acholi, and punished the Acholi for not cooperating and supporting his group. The insurgency was therefore mainly resistance against the government of President Museveni and the NRM. The insurgency was also supported by Sudan in reaction to Ugandan (including Acholi support) to the Sudan Peoples Liberation Army (SPLA) from Southern Sudan (FRR2).

However, neighbouring regions hold the Acholi responsible for the conflict. In the past, the eastern regions have been hostile to the Acholi; the LRA high command is largely composed of Acholi persons. Southern Uganda has long held the perception that the war in the north is the caused by the Acholi. Southern Sudanese attending the Juba Peace Talks assigned responsibility for the war to the Acholi leaders. However, although Acholi justice is not the standard for justice across different regions affected by the conflict, there is shared understanding of reconciliation processes across regions that could be adapted. There is also some agreement between regional actors that traditional justice practices could help facilitate reconciliation. For example, Northern Ugandan and Southern Sudanese cultural leaders have agreed to slaughter a bull at the border to symbolise peace and the restoration of relations. 'Gomo Tong' has been discussed as a means of promoting regional reconciliation in Uganda. (Liu Institute for Global Issues 2006).

The traditional process is therefore not taking place in isolation. The Ugandan government, for instance, took 'clan' responsibility for foreigners killed during the conflict. Other societies in Uganda also accepted the traditional practices. Although it is called different things in different languages, and some of the detail differs, the essence of the importance of togetherness, forgiveness, appropriate compensation and reconciliation to ensure that killing never happens again, are the same. Since 2005, the chiefs of the Acholi have met with the chiefs of Southern Sudan to share information on atrocities committed and understanding about the causes and possible resolution of the conflicts. It was decided that peaceful-coexistence was still an important shared value. This first conference was repeated in July/August 2006. (FRR2).

The Amnesty Law of 2001 was a direct result of the influence of religious leaders on the government. The ARLPI has a research and documents office where information is stored on computers. Several publications are distributed from there to sensitive people about the importance to overcome hostilities. The Inter-religious Council of Uganda is supporting the initiative of the ARLPI. The UN Panel for International Affairs and ambassadors from many countries have expressed their support for the initiative. The United Nations Development Programme (UNDP), the Mennonite Central Community (MCC) and the USAID, among others, are funding the ARLPI. Active learning in modern conflict resolution takes places through visits to universities all over the world. The religious leaders were introduced to the Restorative Justice Approach by the ICC. (FRR3).

External factors, which includes the government of Sudan providing military support to the LRA, the USA working closely with the Uganda government against some Islamic fundamentalist forces in the Sudan (supporting the SPLA as a liberation movement), while financing the war against the LRA (which the USA has categorised as a terrorist organisation), complicates conflict resolution in Northern Uganda. Furthermore, NGOs such as the USAID's Office of Transition Initiative has claimed as one of its central objectives, the promotion of 'national reconciliation and conflict resolution by discovering the truth of what happened during the conflict and supporting public acknowledgement of crimes committed'. (Nabudere 2006c, 9-22).

7.5 MODERN JUSTICE AND THE COLLECTIVE MIDDLE GROUND

According to Nabudere (2006c, 2-11) international law developed principles to govern the conduct of hostilities among states that are sovereign and theoretically equal entities that participates voluntarily. States may enter into legal commitments with other states in their self-interest rather than adhere to International Law. Traditionally, states were the sole subjects of international law, but some international organisations have been recognised as relevant parties to international law. Recent interpretations of international human rights law, international humanitarian law, and international trade law have been inclusive of corporations, and even individuals.

Nabudere reminds that it is in this context, and in view of the need to bring justice to individuals who were responsible for crimes against humanity during modern war, that the

International Criminal Court (ICC) came into existence on 1 July 2002. The development of the ICC followed the creation of several *ad hoc* tribunals to try war crimes in the former Yugoslavia; the International Criminal Tribunal for Rwanda (ICTR) set up in 1994 and the desire to create a permanent tribunal, so that an 'ad hoc' tribunal would not have to be created after each occurrence of these crimes. During the UN Diplomatic Conference of Plenipotentiaries on the Establishment of an International Criminal Court in Italy the *Rome Statute of the International Criminal Court* was adopted on 17 July 1998. Uganda is one of the countries that signed and ratified the Rome Statute and is obliged to apply its provisions and to call on the ICC to assist it to punish individuals that had committed crimes that fall under jurisdiction of the court after 1 July 2002. The ICC is an appropriate mechanism for pursuing accountability for serious crimes under international law, especially in situations where domestic courts are unwilling or unable to act. The ICC therefore represents the international criminal justice system as opposed to the Acholi conceptions of justice.

The involvement of the ICC in Uganda originated on 16 December 2003 when the LRA case was referred by the Government of Uganda concerning all crimes under the Rome Statute committed in Northern Uganda. Subsequently, an analysis was done; starting with the LRA, gravity was the criterion for case selection. On 28 July 2004 it was decided to open an investigation and all parties were informed. A team of 12 investigators and trial lawyers from 10 countries assembled. Evidence was collected during more than 50 missions to Uganda over nine months, including more than 20 missions to meet with local leaders. Meetings took place in The Hague with national authorities and local community leaders. On 6 May 2005, application was filed before Pre-Trial Chamber II for warrants of arrest for crimes against humanity and war crimes. (ICC 2005).

During March 2006, the ICC held a series of consultation meetings with religious and traditional leaders and NGOs in Northern and Eastern Uganda, explaining its mission and strategies. Participants included Archbishop John Baptist Odama, Bishop Onono-Onweng and the Acholi Paramount Chief. The ICC had a two-day session with 50 religious leaders in Gulu, another two-day session with 60 traditional leaders, a one-day session with officials from 30 NGOs in Gulu, 60 NGOs in Kitgum and Pader, 30 NGOs in Lira and 30 NGOs in Teso. The ICC explained its post-arrest strategies. These included promoting international cooperation to execute the arrest warrants. Sudan, which is not a state party

to the ICC, signed an agreement in November 2000 and committed itself to carry out the arrest. The SPLA, in a memorandum of understanding, also agreed to cooperate, with the aim of executing the arrest warrants. If suspects are arrested, all parties now have a legal obligation to hand over the suspects to the ICC. The second strategy involves deterring all supplies and support to the LRA. Though the ICC officials did not want to elaborate on this, they said they were concentrating their efforts on support from outside Uganda. Finally, the third strategy consists of marginalising the five indicted commanders so that other commanders continue to surrender, provided they do not commit any other crimes of the same gravity. (New Vision 2006).

The ICC also did 'field research' in Gulu according to the stipulations of a MoU signed with the Ugandan government. It has done thorough research in Gulu and all findings were shared with Acholi society. The ICC overcame language constraints by employing selected Acholi. Its members spent about six months in Gulu and in some cases acted secretively, which was not part of the agreement with the Ugandan government. (FRR 6).

The peace-versus-justice debate in Northern Uganda has become polarised over the controversy surrounding the ICC, and is often put into terms of false alternatives between peace and justice. Indeed, the way forward in Northern Uganda should be driven by a comprehensive strategy that integrates the strengths of all mechanisms, formal and traditional, aimed at bringing peace and justice to the region. Peace and justice will be achieved in Northern Uganda only through an inclusive process that involves a wide range of stakeholders, including victims, bystanders, and perpetrators. This requires consulting widely and broadly, on the feasibility and applicability of transitional justice measures and, most of all, giving those most affected by the violence a voice in the process. The ICC should implement an outreach strategy that fosters greater awareness among Ugandans of the mandate of the court and mode of operations. This effort should aim to disseminate more information about the court and engage the public in dialogue. Such a strategy should also seek to manage the expectations of victims. As part of such a strategy, the Court should establish a presence in the North so that people will have regular access to ICC staff. Finally, the ICC should consider holding trials on site to increase public access to its proceedings. (International Centre for Transitional Justice 2005).

Outreach activities of the ICC such as a seminar with Ugandan judicial authorities in Kampala on 26 September 2005 are intended to 'inform and coach Ugandans involved in the work of the Court', in particular the Bar, civil society, and the Ugandan media. This seminar was seen by the ICC as an opportunity to work together with Ugandans, to get to know each other and to familiarise with the mechanisms of the different judicial systems (Ugandan and the ICC), and to learn about the difficulties and the challenges on the way forward. The aim was to reduce the distance between the court in The Hague and Ugandans 'who are in the midst of the realities'. The approach is, through a field office in Kampala, to ensure a permanent presence in the field, to enable the ICC and Uganda to work together in the framework of a mutual learning process to improve the efficiency of the work of the ICC. (ICC 2005).

A key informer is of the opinion that the ICC primarily serves the broad political interests of the rest of the international community. The ICC should customise its approach to issues that are relevant in Acholi, based on practicalities. The ICC appears to display that the international community can crack down on atrocities. Several premises are identified. (FRR7)

- The ICC has its timing wrong. Their interference comes at a time when Ugandans are seeking solutions themselves.
- The ICC cannot protect the witnesses it initially used for gathering of sensitive information.
- Mass suicide of abductees is feared if the LRA leaders are put under pressure by the
 ICC. The ICC is not in a position to prevent that.
- The LRA has started killing civil society workers for collaborating with the ICC. How can the ICC protect them?
- The conduct of justice by the ICC is perceived to be below standard. It does things 'underground'. Justice must be dispensed publicly with genuine witnesses present.

The ICC is also faced with the problem that Uganda is a multi-ethnic country, comprising several cultural-ethnic identities within the political community, which contributed to the conflict in the country. (Nabudere 2006c, 4).

Nabudere (2006c, 22-25) argues for a synthesis of the legal claims of the ICC in the current war in Northern Uganda and the claims arising from the Acholi traditional concept of justice and reconciliation. There are political differences and crimes that international

law cannot deal with; it can only provide a framework within which political differences can be resolved and new understandings can develop. Today the emphasis is on political 'reconciliation' rather than a mere 'transition' to democracy, which cannot take place without reconciliation. International law has to promote reconciliation if the project of peace in 'transitional' societies is to be assured.

Nabudere asserts that *ad hoc* tribunals suffer from high cost and a slow pace of execution, the emphasis being placed on foreign experts, foreign models, and foreign-conceived solutions to the detriment of durable improvements and sustainable capacity. Consequently, new *ad hoc* international tribunals, developed in Sierra Leone and Cambodia, have been designed with varying degrees of joint international and local control over them, including local officials, traditional and religious leaders to promote national reconciliation. The ICC should use the Ugandan intervention as a basis for this new 'hybrid approach', identifying through dialogue areas of agreement and legal issues. It is from this comprehensive, democratic approach that recognises the approaches of the local communities that a new legal order can emerge that both the international community and the local communities can accept.

Nabudere proposes an integrative approach to create a new global order in which the voices of all communities can advance a new synthesis based on 'restorative justice', which recognises both the dependencies of the people of the world on one another and at the same time accepts the identities of local communities and their aspirations. 'Restorative justice' centres on the idea that justice must include an effort to 'restore' a lost balance and that prosecution is not the only or the best means to attain this balance. Rather, victims, perpetrators, and the broader community should engage in a dialogue that aims to identify and address the underlying social and political causes of intra-state war, organised violence, and crime, and massive violations of human rights, as is done in the traditional systems of reconciliation of the Acholi.

Nabudere suggests a new response that reflects respect for all human beings based on the philosophy of Ubuntu and the ancient Egyptian philosophy of Maat (see 4.2). Both these philosophies stand for 'connective justice' that holds that all humanity is interconnected and depend on one another. The Ubuntu philosophy that holds that 'I exist because you exist' is the only way to overcome destructive conflicts that insist on destroying others.

After a recent visit by the mediator on conflict in the Sudan, Mr Jan Egeland, a parallel approach to the resolution of the conflict was accepted. The Acholi peace initiative will proceed, while the Prosecutor of the ICC will continue with his task of arresting Kony and other leaders. The interviewee pointed out that Mr Egeland accepted the parallel approach after listening to the views of people around a fire in an IDP camp near Gulu. (FRR3).

7.6 COLLECTIVE KNOWLEDGE PRODUCTION

Knowledge production for conflict resolution in Uganda is extensive but published material is limited to studies done by NGOs such as UN Office for the Coordination of Humanitarian Affairs (OCHA), USAID, ACCORD and the International Crisis Group (ICG), some of them cited in this section. Other production includes workshops by the Ugandan Human Rights Commission, Amnesty International and the work of other NGOs and academics. Most of these studies have been published, updated on the Internet, and are available in library collections. However, nowhere could an assessment be found that was published jointly by the ICC and Ugandan society that is freely available.

Discussion with a key informer revealed that the publication 'Traditional Ways of Coping in Acholi: Cultural Provisions for Reconciliation and Healing from War', compiled by the Caritas Gulu Archdiocese together with Western consultants and with the involvement of European universities, is intended to fulfil a need of the community for a product that can be used specifically for conflict resolution. (Harlacher et al 2006). Copies of the book were distributed to the LRA, the ICC in The Hague and to all interesting parties in Gulu during a launch in Gulu on 11 November 2006. More copies will be mailed to other stakeholders outside Gulu. The timing of the publication was perfect: just when the use of traditional conflict resolution methods became part of the talks in Juba and President Museveni pronounced support for traditional conflict resolution methods. The aim of the publication is to influence policy-makers and the executors of foreign policy to use traditional conflict resolution methods. Research was done by field researchers from the local community who brought back the data, gathered from 'grass-roots' level, to the team of consultants in the head office. The report was compiled by consultants in an information centre together with the social workers of Caritas. Interpretation was facilitated by Thomas Harlacher, a consultant from Denmark. It was the result of a

collective effort by the Caritas Gulu Archdiocese and academics from the University of Freiburg and was financed by the Ministry of Development Cooperation from the Federal Republic of Germany and the Catholic Relief Services. (FRR4).

7.7 EVALUATION

The window of opportunity, which emerged from the consideration of the traditional conflict resolution methods of the Acholi, presented several challenges to actors. One of the challenges was to manage the different knowledge claims from different sources, both local and global. Even within the Acholi, no consensus could be found on what happened. Different entities of society maintained different worldviews, depending on what their experience of the conflict was and what exposure they had to various worldviews.

It transpired that traditional knowledge for conflict resolution depends on the belief of all participants that it meets the universal values such as justice, peace, and humaneness. In the case where the beliefs are not sufficient to achieve the object of peace, the dominant values of the community would remain the knowledge base from which conflict is resolved. This may include the positive norms of *Ubuntu*, but also negative knowledge claims based on exclusivist religious practices, liberation ideology, and wealth motivations. To become part of the knowledge base of African society, traditional knowledge not only needs to be accepted as a valid knowledge claim suitable for formal analysis, but also to be considered in formal policies, strategies and plans to resolve conflict. Furthermore, the structures of society need to be of such a nature that traditional knowledge claims are sufficiently considered, including structures beyond the traditional.

A measure of scientific procedure is discovered in the traditional practices of the Acholi, during which trans-disciplinary gathering of information embedded in spiritualism, social, and intellectual capital of the community is employed to find a holistic picture of what happened. In this procedure the value of narrative as part of an oral tradition and the collective memory of observers or participants are fundamental to the knowledge claims.

The introduction of guerrilla warfare doctrine, the emergence of exclusivist religion, combined with diversion from the traditional principles of *Ubuntu* and the universal principle of respect for humanness resulted in a complex episteme and African knowledge

base. Managing knowledge in this dimension would require innovative KM practices to first find the truth, and then to reconcile that with the expectations of both African society and the global community.

Spiritualism forms an integral part of the episteme but the spirituality of the Acholi is characterised by pluralism as well as tolerance and respect for each other's religion. Interpretation of the Biblical principles by Lakema and Kony cannot be seen as a typical interpretation by African society in general. The knowledge claim of Kony and Lakema and their followers is on a more personal psychological level and not typical of indigenous knowledge in Africa. However, when analysing the normative knowledge claims of African society, this reasoning cannot be discarded, because it contributes to the understanding of the causes of the conflict and measure to be implemented to eradicate it. It is here that traditional knowledge claims and the re-establishment of universal values come into play, which may prove to be more valuable for conflict resolution and reconciliation, especially when supported by the enabling capacity of the social capital of the community and intellectual capital in general.

The misgivings of the Liu institute and others are valid in the sense that they address certain practicalities when it comes to justice and reconciliation. However, the value of the traditional process for gathering data and process this into holistic knowledge for future use cannot be underestimated. Traditional practices may not serve the purpose of finding peace and restorative justice on their own, but this will contribute to valid knowledge claims and understanding of the conflict and measures required for reconciliation.

The reinstated traditional justice system of the Acholi appears to be a suitable instrument to facilitate forgiveness and reconciliation in the broader society. The oral tradition and collective memory of the traditional system allow for in-depth knowledge of understanding of the causes and consequences of instability in their own society and understanding that does not deserve the conventional Western thinking that indigenous people with different beliefs are inferior. It is apparent that such traditional knowledge claims must be recognised and that no obstacles may be placed in the way of knowledge embedded in traditional wisdom. The different levels of information-gathering, including considering the spiritual, social, and trans-national dimension of events and applying

extensive intellectual and social capital, render the traditional system of the Acholi a valid knowledge claim that needs to be managed. The religious-normative foundation of this knowledge claim may be challenged by members of society who are exposed to Western values and modern scientific practices, but such a debate could only enhance the view of society as a whole, as long as one view is not suppressed or allowed to become dominant.

In the context of conflict, some may see the practices of self-disclosure, thorough investigation, agreement on compensation and symbolic ceremony as inadequate for lasting reconciliation, especially where violent transgression as experienced by the Acholi is concerned. Despite these questions, ceremonies such as 'Gomo Tong' may be useful as an outcome of direct and successful negations between former belligerents such as the government of Uganda and the LRA. It is however, of critical importance that participation in the processes is voluntary and that individuals (both the perpetrators and victims) believe in the reconciliatory nature and effect of the process as a whole. Furthermore, whatever ceremony is used, it is not for the scrutiny of outside observers, but for the Ugandan society itself to decide on the success or failure of the traditional method.

It is, however, within the context of KM that these procedures are of critical value to understand causes and consequences of a conflict. If this understanding can be mustered to enhance and even supplant superficial views from a distance (from those standing outside the traditional system), society may be able to participate in a CMG on an equal footing with other entities outside society who previously claimed superior knowledge of a situation.

The society of Acholi succeeded in developing a unique synthesis of indigenous knowledge, subconsciously integrating knowledge claims in the normative domain such as spiritualism, exclusivist religion, liberation ideology and the Western values of capitalism and technology. Furthermore, the society succeeded in articulating this knowledge not only through oral tradition, but also by maintaining a collective memory of events, in sufficient tangible format that it could be useful for formal analysis, synthesis, and interpretation to enhance understanding.

The current structure of the Acholi society lends itself to successful merging of knowledge inputs in a knowledge centre, which may be a tool for self-empowerment of society for

conflict resolution and post-conflict reconstruction and informative to outsiders who wish to make a positive contribution jointly with the local community. Such a 'knowledge centre' could also serve as a tool to establish a CMG between governmental, non-governmental and trans-national organisations through trust building based on the universal values of peace, justice and humaneness.

The product of a 'collective intelligence centre' is ideally a holistic worldview based on the synthesis of knowledge obtained from all participants in the structure, to be used for the renewal of existing plans, actively participating in policies, strategies and plans yet to be developed to meet the expectations of all participants. *Ad hoc* joint working groups can be developed into fully fledged 'collective knowledge centres' as a standing COP, where the intellectual capital contributed by all participants, as equal partners, can make an impact. The structures and culture of learning of the Acholi, especially the social capital of society nurtured by supportive organisations and individuals throughout the years of conflict, coupled with the capacity to use modern ICT to disseminate knowledge to and receive knowledge from other partners, yields suitable conditions for knowledge production.

The government of Uganda, which seeks to pacify Northern Uganda in general and the historically disgruntled Acholi specifically, capitalize on the traditional structures and practices. The Amnesty Law therefore provides a legal framework for the reintegration of former rebels into society. It also provides a suitable opportunity to gather as much information as possible about the conflict, especially information obscured by the guerrilla culture of the 'bush' Acholi. A database encompassing this information would prove to be valuable after peace has been established to prosecute perpetrators of atrocities as a retributive step to satisfy some political expectations. However, use of information for this purpose would defeat the objective of reconciliation and bring about a new level of distrust between Acholi society and the authorities, which would probably lead to new conflict. The purpose of peace and reconciliation would be served best if the data gathered should be used to produce a tangible set of research outputs that could be analysed to find the root causes and consequences of the conflict and to be synthesise these with the wealth of knowledge on conflict resolution that is already available in Acholi society. The indigenous knowledge embedded in Acholi society, together with the research outputs about the conflict, may prove to be valuable for all involved, including the government of Uganda, to remove the causes of the conflict.

Acceptance of the traditional justice approach to conflict resolution by regional actors opens the way for successful implementation of the approach. This means that the Acholi probably enjoy broad support for this approach, enhancing the probability that the collective social, spiritual, and intellectual capital from the region around Acholiland may become a powerful driver of conflict resolution efforts. If the knowledge contributions embedded in this network of all participants can be mustered to enhance the already powerful indigenous knowledge found in Acholi society, a dynamic trans-dimensional environment emerges that is supportive of whatever initiatives are decided upon by the Ugandan societies.

Global religious beliefs systems such as Christianity and Islam are a prominent part of the knowledge foundation of Acholi society and play a leading role in conflict resolution initiatives. Furthermore, mostly Western orientated role-players belief in scientifically based psychotherapy as a method of healing and coping. Other instruments of justice such as modern courts and truth and reconciliation commissions also enjoy some support. However, it is unlikely that any single method would find a complete enough body of knowledge that can be used for peace and reconciliation, or healing on community and personal level. The scope of observation of role-players outside the community is simply too limited to understand completely the scope of causes and forces hidden in the culture and idiom of a traditional society such as the Acholi.

Understanding can be enhanced by community participation in information gathering and research efforts, but understanding will always depend on how the outside organisation lives up to the responsibility it accepted, the structured and strategic framework in which the organisation operates and integrity in treating partners in society as equals. Furthermore, the way intruding organisations relinquish the wealth motive and reflect adherence to the universal values of respect, trust, and humaneness will determine successful participation in a 'collective knowledge centre' and the fusion of indigenous and Western knowledge in a CMG.

The way religious denominations, despite historical divisions, succeed in crossing mental boundaries to include the diversity of worldviews in Acholi society serves as a good example of how an IKS functions. Furthermore, a broad spectrum of social and

intellectual capital converges on conflict resolution in Acholi by means of this inclusive approach. Unfortunately, the reality of persisting violent conflict, not only the internal war in Uganda in regional context, but also the intrusive strategy of the USA to make African countries part of its war against Islam, also introduces some social capital as liabilities. A continued reality of self-interest that marks international relations will probably remains an obstacle to taking full advantage of knowledge in a CMG free from assertive pressure, demands, and exploitation from major powers such as the USA.

Despite the advantages of capitalist wealth and a technologically driven growth economy, which come with relations with major powers, these advantages would remain the privilege of a few to the detriment of the marginalised. Furthermore, the positive bridging social capital of international religious institutions as well as the vision and transdisciplinary insight of religious leaders, still need to be supplemented by sufficient capable facilitators, managers, knowledge workers and other experts from not only Acholi society, but also from the government of Uganda and participating organisations. To manage knowledge effectively, it would be required from amassed intellectual capital to work together in a COP characterised by trust and cohesion. Although some laudable progress has been made with that, the presence of exclusive corporate and political agendas will remain a threat to collectiveness, and prevent all involved from attaining a more holistic and open understanding of what happened during the conflict and from improving the quality of life and human security for all in the region.

In the case of the conflict in Northern Uganda, African society has conceded that it cannot resolve the conflict on its own and that an organisation such as the ICC should become involved. The involvement of the ICC implies a legal obligation to cooperate with the institution and to find common ground. From a KM perspective, it implies combining the knowledge claims, as well as the intellectual- and social capital of both Ugandan society and the ICC in a spirit of peaceful cooperation, trust and respect. Such a combined effort also requires the physical and mental passage of cultural boundaries that divides the worldviews of Ugandan society and the ICC.

The initiative would also require the combined and careful management of all oral or visible knowledge in an atmosphere of equal sharing, confidentiality and cross-cultural cohesion, with both representatives of the ICC and other role-players jointly controlling

the body of knowledge. Moreover, the product of the combined KM effort would be required to be available not only for the court to prosecute transgressors, but also to be made available to the government of Uganda and the Acholi society to restore peace and reconciliation in Uganda and to find justice in the eyes of the affected. It is against these criteria that successful collective KM for conflict resolution in Acholiland should be measured.

The ICC broadened its own scope of knowledge by doing thorough investigation with community participation. It is accepted that the approach followed in gathering data was according to accepted scientific practices for such an investigation. Furthermore, it is clear that the ICC is now sufficiently structured to fulfil its responsibility of gathering evidence for prosecution according a specific strategy and implementation plan. The emphasis is on liaison with stakeholders in Uganda. However, concern remains over the power-relationship between the ICC as international organisation, Uganda as a state and Acholi society, A further concern is whether the ICC represents mostly a Western value system, and how the knowledge perspectives of the ICC differ from the perspectives of Acholi society or affected communities.

To overcome these concerns the ICC successfully entered the existing CMG in Acholi society and between Acholi society and external NGOs and the government of Uganda, the legal fraternity as well as regional stakeholders such as the Southern Sudan. However, the strategy of the ICC leaves very little or no leeway to build trust with the leadership of the LRA or to address the political-structural and socio-economic causes of the conflict in Acholi. Furthermore, the nature of legal indictment and the use of unobtrusive ('covert') techniques is not conducive to the building of trust and respect, the vital elements for cooperation in general and collective management specifically. It is therefore unlikely that the current strategies of the ICC are adequate to obtain sufficient knowledge providing a holistic perspective of the conflict that could be used for conflict resolution.

The lack of visibility of the ICC in Acholi limits the way in which Acholi society views and accepts the ICC as a role player that could meet the expectations of the affected. It is unlikely that so-called 'outreach programmes' would build trust and confidence in the institution effectively beyond good communication and interaction. To be accepted by African society means intra-action, or functioning within and as part of society. Intra-

action with the government and formal structures, with a presence in Kampala or Gulu is simply not enough.

Successful KM in the CMG means settling in the community using mechanisms such as a 'collective knowledge centre' in support of an *in situ* court, with the community accepting co-ownership in a horizontal power relationship with the international institution. It is accepted that there are some security concerns (for instance witness protection) about the ICC functioning *in situ*, but without intense intra-action between the community and the court, suspicion about the motives, perspective, and capacity of the ICC will continue, rendering it simply another demanding and pressuring intrusion into African society. There should be a balance between issues such as the need for security and the need for the institution to be accepted by the community as a well-intended partner. The security needs can be managed, but rejection by society defeats the object of ICC involvement. In Uganda, rejection by one ethnic group will imply that the ICC is seen as just another political instrument to be used against them.

Connective justice, and with that supportive connective KM practices, are required for international institutions to function in society successfully. Connective KM implies the fusion of the knowledge claims of society from all dimensions and domains and from within all communities on the political, social, economic, and psychological/spiritual causes, the conflict itself, and the consequences of the conflict. This implies a new legal dispensation and subsequent requirement for a new synthesis of knowledge and collective intra-action in a middle ground situated in society, to replace a framework of foreign practices followed by the legal and knowledge frameworks of the international institution.

It is accepted that the principles of Ubuntu should form the foundation of connective and restorative justice and the basic principles by which knowledge is managed to ensure these and other positive outcomes. However, it is also recognised that other values such as entitlement, the quest for survival, exclusivist religion, spiritualism, entitlement, liberation from oppression, and the quest for power-dominance will remain obstacles to the reinstalment of the principles of Ubuntu in Acholi society. It will probably require a complex course of action to implement KM practices based on the principles of Ubuntu, implementation that may become more successful as interconnected order is restored in society.

Concerning the modern legal practices that are imposed on society, it is apparent that information gathered as evidence in a court of law, does not always serve the purpose of creating a synthetic knowledge product that can be used for policy purposes. Information on specific cases is difficult to access, and therefore unsuitable to be integrated in time with knowledge obtained from other entities. There is little doubt that sealed information hidden in the archives may be of value for conflict resolution strategies and contingency planning, but is of little value for any other purpose than prosecution if it stays sealed and hidden. However, the value of the knowledge in the archives of the ICC may improve once cases are concluded and the data are accessed and processed to produce intelligence to compile policies, strategies and plans aimed at decisive intervention that would eradicate the causes of the conflict, manage the consequences, and implement restorative justice in society.

Until then policy-makers, decision-takers and activists will have to rely on the very valuable studies and reports by NGOs, government institutions and academics that succeeded in finding intra-connectivity with the communities in Acholi society through joint processing of information. However, the value of the product will depend on how the minds of people with extensive cultural understanding and trans-disciplinary insight were applied in the interpretation of the information.

The activities and the knowledge produced by the ICC are therefore exclusively intended for the use of the business of the ICC to bring justice to society and to intervene where grave human rights abuses took place. The value thereof is limited by the application of mostly a modern Western knowledge framework for interpretation. Furthermore, the knowledge accumulated in the ICC serves very little short-term purpose to affect positive outcomes such as peace, self-emancipation, transformative growth, productivity, self-empowerment, innovation and competitiveness to restore the equilibrium between African society and the rest of the global economy.

7.8 FINDINGS

During fieldwork in Northern Uganda, it was found that the traditional justice system of the Acholi provides a valuable framework of KM practices that can be used for conflict resolution. The traditional system lends itself to the gathering of empirical data from the memory and narrative of the exact original observer or participant, and provides for normative context unique to the specific culture. Furthermore, the traditional system allows for breaking out of the structure towards an intra-connected relationship with broader society during which new knowledge is created.

It was found that traditional practices are reconcilable with modern KM practices, even to the point where the keepers of traditional knowledge can participate in modern collective knowledge activities where tangible knowledge is produced, lending a particular indigenous character to the knowledge product. Furthermore, it was found that traditional and indigenous knowledge inputs are used extensively by organisations in Gulu to produce a synthetic renewable knowledge because of intra-connectedness and convergence in a CMG with the traditional community as part of broader Acholi society. It is especially in Gulu where the trend towards equal complementary nature of IKS and modern knowledge systems were discovered, especially concerning approaches on how to address conflict resolution in Northern Uganda. The intra-action between the church leaders and traditional leaders can be considered as good examples.

In contrast, it was found that an organisation such as the ICC does not succeed in contributing to KM for conflict resolution in a similar way or with similar impact. The gathering of empirical data solely for the purpose of prosecution within a modern normative framework, characterised by a vertical, distant and technology driven power relationship, appears to serve mainly the prosecution strategies and corporate interests of the organisation. The ICC produces very little current knowledge that provides a holistic perspective for early-warning and planning purposes, let alone information to react on emergencies or to prevent conflict. It is in this area that the need for the development of common ground was clearly identified. The two systems (indigenous and modern international) still need to develop to a point where collective knowledge can lead to collective action, complementing each other on equal grounds.

Subsequently, it was found that the social networks and intellectual capital of Ugandan society, together with an intra-connected indigenous knowledge system, based on the principles of Ubuntu, are good examples of a holistic approach to knowledge management for conflict resolution. The indigenous knowledge system of Uganda provides sufficient

opportunity for the people themselves, (including victims) to become involved in local, national and regional initiatives to yield expected outcomes such as peace and restorative justice, leaving the international institution to deal with the expectations of the global society. These practices are probably suitable to be replicated elsewhere in Africa where similar challenges to human rights, peace and security are experienced.

The challenge therefore remains in finding common ground between the indigenous society and the trans-national institution where the knowledge perspectives, intellectual-and social capital can be merged and be collectively managed to find the best possible outcomes for African society.

CHAPTER 8: KM FOR RECONCILIATION AND CONFLICT PREVENTION IN RWANDA

'Where were you when it happened?' -Paul Kagame

8.1 INTRODUCTION

In 1994 Rwanda experienced a genocide⁸ that left an estimated 800 000 Rwandans dead and many others displaced or wounded. Today, the country is working toward reconciliation and designing structures to promote an energetic, peaceful and sustainable post-genocide society. In September 1996, the government of Rwanda promulgated the Organic Law no 16/2004 of 19/06/2004, which aimed to facilitate the prosecution of crimes related to the genocide that took place between October 1990 and December 1994. In spite of real efforts to implement the law and ensure the effective prosecution of suspects, it soon became apparent that the law was not likely to lead to a timely resolution of the problems associated with the trial of genocide suspects. Experts predicted that it would take at least one hundred years to try all the suspects. Against this background, the Rwandan government considered other means of addressing the problems associated with the trials of genocide suspects. The government of Rwanda realised that a judicial system that ensures participation of the community in the process of investigation could be a viable option in the modern judicial system. Subsequently three judicial institutions were constituted to handle criminal cases classified in different categories: The Gacaca Traditional Court System, the ICTR and the national penal courts of Rwanda.

The purpose of Chapter 8 is to report on a field study that was performed in Rwanda and at the ICTR in Arusha during 2006 on KM within the Gacaca court system and KM in the ICTR in Arusha. KM in both entities will be discussed with specific reference to

⁸ According to the Statute of the ICTR, genocide means any act committed with the intent to destroy, in whole or in part, a national, ethnical, racial or religious group such as killing members of the group, causing serious bodily or mental harm to members of the group, deliberately inflicting on the group conditions of life calculated to bring about its physical destruction in whole or in part, imposing measures intended to prevent births within the group and forcibly transferring children of the group to another group. The above definition reproduces that was formulated by the Genocide Convention of 1948.

intellectual and social capital and the finding of CMG between the ICTR and Rwandan society.

8.2 THE INDIGENOUS GACACA COURTS SYSTEM

The 'Organic Law' established the organisation, competence and functioning of Gacaca courts. The 'mission' of this system is to achieve 'truth, justice, reconciliation.' It aims to promote community healing by making the punishment of perpetrators of crimes faster and less expensive to the state. According to the official Rwandan government website (http://www.rwandagateway.org/) of the National Service of Gacaca Jurisdictions, the system aims to achieve the following objectives

- the reconstruction of what happened during the genocide
- the speeding up of the legal proceedings by using as many courts as possible
- the reconciliation of all Rwandans and building their unity.

8.2.1 FUNCTIONING OF THE GACACA COURT SYSTEM

The Gacaca court is a legal system inspired by tradition. Gacaca is the revival of a traditional court system of 'wise men' that continues to be both the symbol and achievement of justice at the village level in the Great Lakes region. Originally, the Gacaca settled village or familial disputes. They were constituted as village assemblies, presided over by elders, where eveyone could ask to speak. Gacaca translated from Kinyarwanda roughly means 'justice on the lawn'. The type of conflict dealt with by the Gacaca was related to social cohesion, tolerance and peaceful co-existence in the densely papulated rural communities. Conflict was dealt with by elders undertaking mediation. The Gacaca courts were not rendered obsolete by colonialism or independence and Incorporating Gacaca into the process of accountability for crimes remained active. during the genocide is a unique process similar to the traditional mechanism but incorporates a contemporay legislative framework derived from the Penal Code of Rwanda as well as international conventions to which Rwanda subscribed. It provides the opportunity to Rwandans to access justice that the ordinary courts and international courts in Arusha and The Hague can never offer. (Mibenge 2005,187-194).

Gacaca jurisdiction was established at the different administrative levels, from the *cellule* to the *secteur*, the *commune* and the *préfecture*. The Gacaca Law regulates the functioning of Gacaca jurisdiction. It prescribes how people register, nominate and vote for Gacaca tribunal judges and explains the role and responsibility of the Gacaca tribunal at each administrative level.

The Act on the Organization and Pursuits of Crimes of Genocide or Crimes against Humanity of August 1996 created four categories of criminals:

- Category 1 cases, persons accused of planning, organising or supervising the genocide, and committing sexual torture.
- Category 2 cases involve those who were perpetrators or accomplices of homicide.
- Category 3 encompasses people who committed crimes of aggravated assault without the intention to kill,
- Category 4 cases involve those who looted or destroyed other people's property.

The Gacaca system deals with accused in Categories 3 and 4, while the ICTR deals with accused in Categories 1 and 2.

The Supreme Court has been expanded with a 'Gacaca Courts Department' to co-ordinate and supervise the activities of the various courts without having to interfere with the decisions that they will have to make, and to keep the national as well as the international community informed about the activities of the Gacaca Courts. In effect Gacaca has the mission of cleansing Rwandan society of the destructive notion of ethnicity that formed the psychological foundation for the genocide. The Rwandan government has embarked on a programme of reconciliation to abolish the former preoccupation with ethnicity, destroying the dangerous stereotypes that divided people and deal with the trauma caused by genocide.

The difference between the Gacaca court system and the 'Western court system' lies in the following elements of Gacaca (FRR 8):

- Conflict is resolved or managed
- Parties to the conflict are reconciled

- The offender is rehabilitated to become a member of society again
- Justice is restored in its totality.

8.2.2 KM IN THE GACACA COURT SYSTEM

Gacaca is meant to embark on a reconciliatory process of healing and forgiveness. During the Gacaca trial the survivors and perpetrators of the genocide come face to face to recount how they suffered attacks and lost family members and friends, while the perpetrators, as a result of the killings in which they participated, lost their sense of humanity. If the suspect wishes to confess his crimes, the president asks him publicly all relevant details and the audience is requested to reflect on the confession and give their view of the truth of the confession. The suspect is allowed to modify his confession if he appears to have forgotten some detail. The jury deliberates *in camera* to judge whether the confession is complete. If the jury finds the confession correct, it can grant the defendant a reduced penalty. If the suspect pleads innocence, the president asks those in attendance and the state prosecutor to testify either for or against the suspect. After the public hearing, the jury goes *in camera* to determine guilt and penalty through majority consensus. The Gacaca Law also includes a confession and guilty plea clause that makes provision for reduced sentences for those who confess and plead guilty.

The Gacaca law advocated that Rwandans must select 'Inyangamugayo' as judges. Members of certain professions such as government employees, police, soldiers and judges are excluded from Gacaca seats or from being elected to the general assemblies of Gacaca. Rwanda elected Gacaca judges in October 2001, in elections that were described as free and fair. A Gacaca President presides over a Gacaca session/trial. A Gacaca secretary takes note of each day's proceedings. Nine members act as a jury, following all the proceedings and determining guilt. (FRR9).

The key informer confirmed that Gacaca is part of the Rwandan culture. People used to sit together to settle family disputes, which were solved by discussing issues in the presence of village elders who were regarded as 'wise'. Today the aim of Gacaca is to remove suspicion among people by denouncing the guilty parties. It also helps to eradicate a culture of impunity and enable the people of Rwanda to live in peace and harmony again. The genocide was a state-sponsored project, now the new government is mobilising the people to restore justice. This can only be done if the people of Rwanda collaborate in

disclosing the truth about the genocide. The people of the country know how genocide was planned and committed and who participated. The truth must be promoted to replace the politically instigated hatred and the trauma families went through. Promoting harmony and 'oneness' must become part of a learning process. Racial consciousness must be replaced with a consciousness of facing the consequences of the genocide together. Today the Gacaca process is the foundation for reconciliation among Rwandans after the genocide.

According to a key informer (FRR 8), the judicial system was destroyed during the genocide. The remaining lawyers were not enough to prosecute and there were not enough jails in Rwanda. Subsequently it was decided to modernise the traditional system to deal with the crimes. Gacaca judges who function on Sector and cell level replaced the elders. The national senior Gacaca judge, who only has a coordinating function, heads the structure. Twelve provincial coordinators and 106 district coordinators assist the senior judge. The actual courts are functioning on sector and cell level with a court of appeal also on sector level.

The key informer confirmed that Gacaca is about the settling of disputes by elders looking for solutions together with the conflicting parties by sitting on the 'lawn'. Old men were considered 'wise'. However, in the traditional system the aspect of human rights was never considered. Information was also not codified. There was always the possibility of violating human rights. The modern Gacaca courts took knowledge from the traditional way and modernised it. The rule of law is now followed and it is accepted that not only the old men are wise. Judges are selected according to very specific criteria. Apart from the requirement of the judge not being involved in Genocide, the person must have integrity, be of non-discriminatory nature, may not have been imprisoned before for a crime, must be worthy of the trust of the community and a person who allows other to talk. Age is not a criterion anymore. A total of 169 442 judges has now been appointed for 12 013 courts.

Two distinct information collection stages can be identified:

Stage 1, now completed, was information gathering including an inventory of the people killed and entailed reconstruction of the events of 1994. For this purpose, the community was divided into cells of ten households each. People were told of their obligation to participate. Everything was written down. Subsequently files were available on everybody involved, including witnesses and collaborators, focusing on Category 2 offences. A census was done by and among local people of who stayed where. In some cases, whole villages were wiped out. Data were also gathered on where alleged perpetrators were.

• During stage 2, this information is sent to a sector nodal point where it is captured on a database. Most case data are still in written format, but the capturing process has already started. The whole structure from sector level is supported by modern computer systems, linked in a Wide Area Network (WAN). The Gacaca Service, the Supreme Court, and the Prosecutor General can access the data. A panel interpreted the information to identify the killers. Since 1999 about 120 000 people have been arrested and prosecuted for genocide related crimes.

One of the advantages is that many people in Rwandan society are now learning about legal issues and justice. According to Article 29, responding to the Gacaca is a law to every Rwandan. They participate as normal citizens. Gacaca has now tried more than 40 000 cases in Categories 1 and 2. The investigations take place on the crime scene on cell level. Information is captured in writing and is gathered at the different sector centres, where temporary knowledge workers capture it in computers. It is done on a temporary basis because it is too expensive to employ them full-time. The capturing activity is coordinated from main centres and data are verified to ensure that the captured facts are not changed. Gacaca is doing well where there are not many psychological issues involved. Every criminal act is revealed and the truth is found. Punishment is linked to confession. However, some genocide 'ideologists' opposed to Gacaca can still cause harm to people. Criminals who followed the ideology of genocide cause tension.

Research on the viability of the Gacaca system addressed the following aspects (Babalola & Gabisirege 2001):

- Kinya-rwanda is universally spoken in the country and 45% of people are not literate in any language. All who are literate can read Kinya-rwanda.
- Respondents from most of the other prefectures are predominantly Christians but about one-fifth of the respondents from Kigali Ville are Muslims.

- Poverty is generally perceived as the most important social problem in Rwandan society today and most of the problems of poverty are perceived to be directly linked with the genocide. Poverty is expected to be resolved through the Gacaca process.
- Among the various segments of the Rwandan population, strong negative emotions about the genocide persist. Among these emotions are fear, depression and a sense of insecurity. It is not certain what effects the Gacaca Law (for example, community participation in the election of Gacaca judges, provision of pertinent evidence before the court) will have on the negative emotions of people and to what extent these emotions will affect active participation in the process. The Rwandan government, along with international and national agencies and individuals experienced in managing the psychosocial effects of violent conflict, should try to identify possible links between post-genocide emotional states and the fulfilment of civic responsibilities and coping strategies.
- Awareness about Gacaca jurisdiction is high but actual knowledge is low. Most of the respondents have heard about Gacaca jurisdiction but few know how the jurisdiction functions or what the specific role of the community is.
- There is concern about the possibility of witnesses and culprits lying to the tribunals and of judges being corrupt. There is a certain level of confidence in the potential usefulness of Gacaca and Rwandans have high expectations that the law and the resulting Gacaca jurisdictions will help to resolve the problems associated with the trial of genocide suspects and that the law will lead to sustainable peace in the country.
- The prominence of community meetings and interpersonal sources within the community justifies the use of community activities as complementary channels. Family members and community leaders play a significant role in decision-making about personal matters. Community leaders and family ties are significant influences in terms of decision-making. This finding, especially in terms of community leaders, points to the viability of using these people as change agents in the community.

According to a key informer (FRR11) the priority is to sensitise people to participate actively in the Gacaca process. Most people keep quiet to protect their relatives, survivors are hiding and people are in denial. They expect other people to reveal the truth. A

pastoral letter from the Bishop is read in every Gacaca. The letter promotes Christianity as the champion of truth. People are even expected to give evidence against own family members. This is not seen as unethical because of the nature of genocide.

Other problems about collecting evidence are experienced:

- There are very few survivors. In some cases, there are no eyewitnesses.
- A huge number of people participated. There are covering up for one another.
- People who disclosed facts are threatened and killed. Some incidents took place shortly before the interview.
- The ideology of genocide persists in some minds.

The following factors were identified that would influence KM in the Gacaca court System (FRR29):

- People tend to forget the details of events.
- The Gacaca court system is seen by many as victor's justice marked by political interference. The victors (the government) drive the process and determine the standards of justice. It is a state driven process and civil society was not fully involved in the formation of the court system. Suspected killers and victims are not treated on the same level. It is not Tutsi against Hutu. The suspects are not all Hutus; not only Tutsis were victims.
- The communities were involved because the grass-roots distribution of information was successful. In this way, it contributes to national reconciliation. Gacaca aims at changing the perceptions of people. Unfortunately, expectations of retribution have taken over the original aim of restorative justice.
- People are suspicious of the capturing of information in writing and on computers. It was never part of the oral tradition and confidentiality within the family or clan circle.
- The traditional Gacaca, which was community-based and personal, was never meant and is not suitable for a big effort such as this. Traditional Gacaca also implies that transgression was forgiven after confession, compensation and ceremony. To jail people was never part of the tradition. In serious cases, people were excommunicated.

- Many of the judges are Hutus and not trusted by Tutsi victims.
- The root cause of the genocide lies in the doctrine of difference that is embedded in the minds of people. This doctrine is reinforced by the belief of some Tutsis that they are of celestial or special origin and superior to others. On the side of the Hutu the subconscious belief that they have been disempowered and deprived by the Tutsi and colonial powers is strong. The withdrawal of colonial powers created the opportunity to settle these differences in a violent way. Gacaca is not successful in contributing to removing this notion.

8.2.3 EVALUATION

The academic perspective of how collective knowledge of Rwandan society is managed within the Gacaca court system reflects a move from a cultural practice of dialogue on micro-level to a modern conflict management system on national level, using the legal approach. The legal approach is necessitated by the criminal nature of the strategies followed during and after the internal war in Rwanda during the 1990s. The legal approach requires legal practices of criminal investigation, presentation of evidence in a court of law and findings that would address only the value of justice, not political or other expectations. The system proved to be valuable in determining the scope of the genocide, but its effectiveness for reconciling and restoring could only be judged once its implementation has been completed.

Meanwhile, a body of knowledge is being accumulated that could be valuable to determine causes, the modus operandi and the consequences of genocide in order to identify indicators for early waning on similar events, not only in Rwanda but also elsewhere. Especially the successful move from data in oral form to computerized information could be valuable. It is in finding the truth as basis for reconciliation that the power of Gacaca is situated. The success of the system as a conflict resolution mechanism will be determined by whether the 'truth' as perceived by the Rwandan population and the findings of the judiciary correlates.

The collective KM for reconciliation in Rwandan society is demonstrated by the Gacaca court system as managed by the Department of Gacaca courts. It is founded on traditional

practice with the added elements of modern rule of law principles, codifying of narrative data and a consciousness of human rights. Modern Gacaca requires the involvement of the whole population, including the 'higher minds' of society to find the truth as a foundation for reconciliation. Unfortunately, the truth is still obscured by those who fear it and still favours the ideology of genocide. However, a large amount of data is still being collected and processed into tangible information that can be used as evidence in court cases, allowing for the application of 'higher minds' to find the truth. The Department of Gacaca appears to view the ICTR as inefficient and perhaps a competitor, preventing merging of information.

The Gacaca courts system, being inspired by tradition but modernised to meet the standards of modern justice, is a good example of an effort to merge the principles of traditional and modern practices in a formal manner. A specific law guides the implementation of what emerges as a formal indigenous system with the purpose of finding justice and reconciliation. The system also emerges as a formal system to manage knowledge claims on a specific issue, in this case claims of knowledge of what happened during the Genocide of 1994, in order to construct a version of the truth that could serve as the departure point or for decisions and actions on national reconciliation and possibly redressing historical dysfunctions.

The hierarchical court system provides a formal structure within which knowledge must flow from the level of the household to provincial level. The flow is therefore subject to value adding and merging with other knowledge, as it flows through the system, ensuring that as many as possible voices are heard in order to find valid evidence of events. Unfortunately, such a structure also allows for control and manipulation of what is listened to, what is gathered and what flows through the system, to where it is centrally merged and used. A further limitation of the system is that information on serious crimes is gathered and processed by a modern judicial system, which does not necessarily imply free sharing of knowledge. The issue of the manipulation of the flow, together with the split in responsibilities of different court systems, impedes the possibility of a holistic picture emerging.

The political and social mission of removing racism as a cause of conflict created an expectation that poses a challenge to the success or failure of the system. From an

epistemological point of view, this mission implies a deep-rooted normative knowledge foundation in society that contains racism as an ideology, which not only drives political action and social activities, but also determines the Rwandan perspective of the world. The Gacaca seeks to replace this worldview by using knowledge under oath, obtained from collective memory and mostly narratives from survivors and observers.

Participation in the Gacaca allows the opportunity for all citizens to exercise their civic responsibility to be an agent of change by means of revealing the knowledge the individual has of the causes of the conflict and possible remedies. However, such an ideal situation is constrained by issues like a continued ideology of genocide among a minority of people, lack of trust and confidence of judges, limited knowledge of this hybrid between traditional and modern practices, strong emotions about what happened during the genocide and awareness of poverty and relative deprivation as causes of conflict in society. Combined with the practicalities of many eyewitnesses being killed, forgetfulness, continued intimidation of eyewitnesses and cover-ups the Rwandan society emerges as an episteme showing particular characteristics that can be seen as part of a post-conflict society.

The formal gathering of data in a structured way from the collective memory of survivors, capitalising on the oral tradition of society, is a good example of scientific methods meeting traditional practices. The good practice of interviewing people in their own language and within their own cultural idiom, with the support of political, traditional and religious leadership to extract data needed for decisions to be made and actions to be taken, manifests itself in the methodology of the Gacaca court system. However, data is still gathered from an environment of diminished Ubuntu (if compared with traditional societies in Africa) and religious practices that could not prevent genocide and crimes, despite a deeply religious society. The question that must be asked is if evidence and data are not still driven by the psychological consequences of genocide, the ideology of racism and genocide, and a quest for revenge, despite official stances indicating the contrary.

If the collective knowledge of Rwandan society about conflict prevention is evaluated, several obstacles to accessing the knowledge are found. The limited availability of observers who are willing to transform their memory of events into narrative restricts the use of the Gacaca court system as a method of collecting knowledge. In this case, the religious norms of society are used to unlock knowledge, reinforced through a new

learning process to replace the knowledge claim of racial differences with the tradition of togetherness and oneness.

The processing of data into a tangible format for decision taking in order to act is a further good practice of Gacaca. During this process, it appears that information is integrated in a structured way from geographical target areas and merged in 'knowledge centres' on sector level, where it is captured and integrated for analysis, synthesis and interpretation on national level by experts and probably political input. These are common practices in any modern KM environment, reminding one very much of a military style structure, which is not completely divorced from the traditional hierarchy.

Only the element of ICT is added to enhance the functioning of the system. It is, however, the way in which the output of the Gacaca system is shared with other actors, including the broad population of Rwanda themselves and supporting entities such as the ICTR, which would determine the effectiveness of the system to find lasting solutions. Illiteracy and reliance on narratives in Kinya-rwanda, poses a challenge to the processing and sharing of understanding with strategic partners outside Rwanda and the finding of middle ground, where it was agreed that cooperation should take place. On the other hand, it presents suitable circumstances for the protection of information the society of Rwanda deems privileged.

During the procedures on the 'lawn' evidence is gathered by listening to narratives (including confessions of guilt), judgement on evidence is given and the guilty is punished with jail terms, with the ultimate aim of restoring the humanity of and forgiving the perpetrator. Epistemologically the procedures on village level are of value to create an understanding of the forces at play before and during the genocide. Especially when the intellectual capital of a jury as a form of community of practices is applied, an accurate view of actual events may emerge. Although not directly and immediately useful to eradicate ideologies such as racism and genocide, it may lead to a complete understanding of the underlying causes and consequences, an understanding that will be useful for actions to prevent similar events from recurring.

Rwandan society musters its available intellectual capital in an artful way and applies it to find justice and reconciliation, effecting trans-disciplinary learning in the process. The

emphasis is on placing people with an understanding of society (the 'higher minds' of society) in control of judging. The emphasis is on diversity in terms of age, ethnic origin, occupation, and gender. The main advantage is that people in Gacaca now learn a new value system based on a consciousness of human rights and justice replacing negative ideologies.

Whether Gacaca procedure will remove the psychology of resentment will probably depend on whether the victims of the genocide (including the current government) and human rights observers trust the process to be legitimate. If the population and the global community accept the outcomes of Gacaca as a logical sequence of sufficient knowledge of events, followed by appropriate action in the form of punishment for the level of crime committed, the purposes of Gacaca may be served.

The perception that Gacaca is 'victor's justice' and the fact that the system is driven by the government and not civil society is an obstacle in this regard. Although civil society appears to play a dominant role in the process, the government retains full control over the processing of information and ultimate decisions, especially decisions on when and where to share information. On the other hand, the expectation of retribution from a part of society requires a measure of political input to ensure that justice is seen to take place. It is here that the requirement of society to approach conflict resolution in a holistic manner is detected. A judicial system or 'restorative justice' on its own will probably not effect the resolution of conflict. A combined effort by the 'pillars of society' to gather data and process it into tangible knowledge where all the 'higher minds' of society are applied, presents a powerful indigenous knowledge base on which firm decision can be taken on how to effect national reconciliation, meeting the expectations of the majority of the indigenous society as the highest priority.

In this context, the Gacaca system should rather be seen as a model of a modern IKS, rather than a traditional system. Gacaca diverts from the procedure of confession, compensation, and ceremony, incorporating modern political and judicial practices with the unique culture of civil society in a system characterised by trans-disciplinarity and modernity. It is not clear whether this system will succeed; as the knowledge system will depend on the how the product of the system is successfully used by the 'higher minds' of society. It was found that success would require the replacement of a doctrine of racial

differences with a doctrine based on the principles of Ubuntu and the universally accepted principles of human rights and peaceful coexistence, towards meeting the dominant expectations in Rwandan society of peace, justice and transformative socio-economic growth.

8.3. THE ICTR AS TRANS-NATIONAL KM ENTITY

Recognising that serious violations of humanitarian law were committed in Rwanda, and acting under Chapter VII of the UN Charter, the ICTR was set up by the UN Security Council to play an important role in combating impunity by perpetrators of gross abuses of human rights whose acts constitute serious crimes in international law. The ICTR is governed by the 'Statute of the International Criminal Tribunal for the Prosecution of Persons responsible for Genocide and other serious violations of International Humanitarian Law Committed in the Territory of Rwanda'. It also includes Rwandan citizens responsible for genocide and other such violations committed in the territory of neighbouring states between 1 January 1994 and 31 December 1994. The document is an appendix to UN Security Council Resolution 955 of 8 November 1994. Through UN Security Council Resolution 977 of 22 February 1995, the Security Council decided that the seat of the ICTR would be located in Arusha in the United Republic of Tanzania. (ICTR 2006).

8.3.1 FUNCTIONING OF THE ICTR

The Rules of Procedure and Evidence, which the judges adopted in accordance with Article 14 of the Statute, establishes the framework for the functioning of the judicial system. The ICTR consists of the chambers and the appeals chamber; the office of the prosecutor in charge of investigations and prosecutions and the registry, responsible for providing overall judicial and administrative support to the chambers and the prosecutor.

• The office of the prosecutor is based in Arusha, Tanzania and is divided into two sections: The investigation section is divided into teams responsible for collecting evidence, implicating individuals in crimes committed in Rwanda in 1994. The prosecution section is composed of trial attorneys responsible for prosecuting all cases before the ICTR and legal advisers for both the investigations and the prosecution.

- The registry is responsible for the overall administration and management of the ICTR. The registrar provides judicial and legal support services for the work of the trial chambers and the prosecution. The registry also performs other legal functions assigned to it by the ICTR's *Rules of Procedure and Evidence*, and is the ICTR's channel of communication.
- The Witnesses and Victims Support Section was established pursuant to the Statute and Rules of Procedure and Evidence, under the authority of the Registrar. The section consists of two units: one for the prosecution of witnesses and one for defence witnesses.
- The Defence Counsel and Detention Management Section was to assure the provision of competent defence counsel to needy accused/suspects who have been detained and to ensure that the UN Detention Facility conforms to international standards.
- The Court Management Section provides administrative, judicial and logistic support to the proceedings before the three Chambers of First Instance, as well as the Appeals Chamber of the ICTR. The objective of the Chamber support team structure is to ensure the smooth running of the judicial proceedings.
- The Judicial Records and Archives Unit is responsible for providing a records management service, which includes receipt, filing, distribution, storage, and preservation. The Court Reporters Unit consists of English-speaking court reporters and French speaking court reporters charged with the verbatim recording and production of permanent transcript records of all judicial proceedings, including the timely provision of transcripts to Chambers and parties.
- The Appeals Unit supports each chamber and the appeals chamber, which is based in The Hague, and which periodically sits in Arusha for appeals hearings.
- The three Trial Chambers and the Appeals Chamber are composed of judges elected by the General Assembly from a list submitted by the Security Council. The judges are initially selected from a list of nominees submitted by member states of the UN taking into account adequate representation of the principal legal systems of the world. Through *UN Resolution 1431 of 14 August 2002*, the UNSC decided to establish a pool of 18 *ad litem* judges. At any one time, a maximum of four *ad litem* judges may be attached to the Trial Chambers. On 27 October 2003, the UNSC adopted *Resolution 1512* and increased the number of *ad litem* judges who may serve on the ICTR at any one time from four to nine.

Concerning investigating and preparation of indictment, the prosecutor has to initiate investigation *ex-officio*, or based on information obtained from any source, including from governments, UN organs, intergovernmental organisations and NGOs. The prosecutor has the power to assess the information and decide whether it is sufficient to proceed. The Prosecutor shall have the power to question suspects, victims and witnesses, to collect evidence and to conduct on-site investigations. In carrying out these tasks, the prosecutor may seek the assistance of the state authorities concerned. When questioned, the suspect is entitled to be assisted by counsel of his or her own choice, including the right to legal assistance without payment by him or her if he or she does not have sufficient means to pay, as well as necessary translation into and from a language, he or she speaks and understands. Upon a determination that a prima facie case exists, the prosecutor must prepare an indictment containing a concise statement of the facts and the crime or crimes with which the accused is charged under the statute. The indictment has to be transmitted to a judge of the trial chamber. (FRR24).

A video seen at the ICTR (FRR 12) touched on the difference between current truth, truth according to the media and judicial truth. The ICTR deals with judicial knowledge, which means the investigation and production of evidence to prosecute. The ultimate objective of the ICTR is to prevent repetition of the 1994 genocide in Rwanda. The object is to try those who took no active steps as leaders to prevent the genocide, in other words those leaders who participated or stood aside and watched while the killings took place. However, forgiveness is vital for reconciliation in Rwanda. Therefore, measures are taken to encourage witnesses and accused to come forward. The defence and prosecution work together to plea-bargain, to find mitigating circumstances and to encourage others to confess or give evidence. Therefore, there is a comprehensive witness protection programme run by the ICTR to alleviate the danger of retaliation against witnesses.

By November 2006 at the UN detention facility in Arusha, 17 accused were awaiting the commencement of their trials. Some of these trials commenced in 2007. Nineteen accused were still at large. The prosecutor completed investigation against 16 suspects. The files involving eight of these suspects have been closed because of insufficient evidence, and eight indictments against the remaining persons have recently been confirmed. The actual

number of persons brought to trail will be lower, as some of the indicted and suspects may be dead or may never be apprehended. (ICTR 2006, 39).

8.3.2 ICTR STRATEGY

The Completion Strategy of the ICTR as on 19 May 2006 takes into account the deadlines set in Security Council Resolutions 1503 (2003) and 1534 (2004). According to the strategy the cases involving the 27 accused, whose trials are currently in progress, were to be completed from 2006 onwards. Trials of the remaining 16 accused (ten detainees awaiting trial and six indictees at large) will commence as soon as Trial Chamber and courtroom availability permits. It is estimated that by the end of 2008, the ICTR will have completed trials involving 65 to 70 persons. The ICTR has adopted numerous measures to speed up trials. This version of the Completion Strategy also describes new initiatives associated with the management of information and evidence by the Office of the Prosecutor, as well as the Registry's support to the efficient management of trials. Furthermore, the document gives an overview of the ICTR Outreach Programme, including capacity building in Rwanda. Factors that contributed to a reduction in the number of trial days included the difficulty in having witnesses from Rwanda appear in court and the illness of judges and counsel. (ICTR 2006, 2-11).

According to Security Council Resolution 1503 of August 2003, the following timelines must be adhered to:

- December 2004: Completion of Investigation
- December 2008: Completion of Trials
- December 2010 Completion of Appeals

Other challenges are

- Reluctance of member states to accept acquitted persons
- Loss of evidence necessary for the successful prosecution of trials
- Lack of cooperation by some member states in apprehending ICTR-indicted fugitives
- Limited scope of protection provided by host countries of witnesses strategy
- Difficulties in transferring cases to national jurisdictions
- Lack of resources in implementing the Outreach Programme to support capacity building and sensitization of member states

Completion of appeal cases in 2010

A new section, the External Relations and Strategic Planning Section has been established in the Immediate Office of the Registrar and a Chief of the Section was appointed on 1 February 2003. The rationale for the establishment of this section is the need to harmonise the external relations activities of the registry by consolidating these activities into a single structure, which ensures better cohesion and integration of these activities, previously undertaken by different units, each reporting directly to the registrar. The functions of the new section include:

- the relations of the ICTR with member states, other international organizations, non-governmental organizations, professional associations, academia and the private sector;
- strategic planning and policy development;
- fundraising;
- public information; and
- protocol and conference services

The strategic plan of action spells out the vision, the mission, the objectives, the mandate and the strategic approaches as well as the proposed multifaceted actions to be undertaken in four years (2003-2007). In order to improve the public image of the ICTR as a whole, and to ensure that the work of the ICTR is known and understood in Rwanda, in the African continent and worldwide, a broad spectrum of communication methods will be used. (FRR28).

During 2006 and 2007, managers were moved to crises areas within the context of the completion strategy. The immediate challenge of the strategy will be to handle the increase in witnesses, including accommodation and safeguarding. The support section will take a lot of pressure. Experts from other organs will have to support the effort, while the core staff and supervisory capacity are maintained. (FRR18).

8.3.3 KM IN THE ICTR

According to a key informer (FRR20) the management of knowledge in the ICTR is a decentralised activity due to the nature of work the ICTR. The following entities within the organization manage knowledge.

- Office of the Prosecutor (the Evidence and Information Section). The knowledge includes dockets and exhibits used in trial Chambers where the court cases take place. This information cannot be shared freely.
- Registry. Several 'pockets of information' includes a database on external relations, specialist libraries (Legal Library and Reference Units in Arusha and Kigali), the database of the Defence Council Management Section that is not shared, a comprehensive knowledge base by the Witness and Victims Support Section in Kigali and Arusha, the Language Services Section, and a Judicial Records and archives unit.
- Division of Administrative Support Services. This division has several sections in which a single information management system is used. The sections and unit include the Budget Unit, Procurement Unit, Human Resources Planning Section that manages human resource information on personnel administration, training, staff welfare, general services data on the entitlement of 609 international staff members and consultants, to support decisions on the validity, cost implications, and feasibility of training and travel of personnel. The Security and Safety Section keeps a security database with crime-related information. An electronic data processing system and a Communications Unit completes the structure.

Since 2000 an electronic recordkeeping system, TRIM, has been in place and the backlog of records were captured by August 2000. Since then daily entry of all new judicial records takes place. All legal staff and parties have access to all public records and selected confidential records as required. Prior to 2002, no archiving system or policies were in place. The UN HQ will be the custodian of all ICTR judicial records in perpetuity. The ICTR now comply with accepted 'best practice' standards in relation to back-ups and disaster control, public access and judicial information dissemination, electronic recordkeeping systems, and an ICTR website.

Creation and maintenance of networked folders for electronic records involve extensive use of networked resources for information-sharing and statistical purposes. Staff can access required information more easily to carry out their assigned functions. Kinyarwanda interpreters provide simultaneous interpretation for court proceedings.

A library catalogue (OPAC) is now available not only to ICTR staff members, but also to external users through the ICTR website. Users can conduct specific searches on topics of interest. Capacity building in Rwanda on information management takes place through annual training to the Rwandan judiciary staff and law students in online legal searching. The training sessions contribute to better visibility of the ICTR and to the promotion of its work. Improvements in scanning, storage and preservation of evidence have not only accelerated the processing of evidence but have also made them more secure and improved services to the trial team. (ICTR 2006, 31-35).

The public communication of the ICTR includes the distribution of daily press clippings from the Internet, weekly press reviews and periodical bulletins through electronic mailing lists to those mandated to be part of the national reconciliation process. A comprehensive website is also maintained, containing all detail including the content of court cases. Press releases are also sent all over the world when important announcements are made. There is a press briefing every Friday afternoon by the press centre run by the EU News Information in the communications section comes from the chambers, Foundation. prosecution and the registrar. The section coordinates the distribution of the information and represents the public image of the ICTR. It is seen as a small processing unit functioning with the assistance of librarians. Clarification and responses are required from internal entities. This ensures that the interpretation of facts is collective within the ICTR. The population of Rwanda is the main target group and messages are communicated in three languages. The people of Rwanda must be made aware that even influential people can be indicted and that their arrests are part of a reconciliation process. This is also a message that is relevant to the rest of the African region. (FRR13).

According to a key informer (FRR17), ICT management in the ICTR involves the coordination of telecommunication and technological support in cooperation with the staff of the ICTR. The ICTR uses ICT extensively, including data, video and voice broadcasts. Sound systems are in three languages. A total of 450 hours of videoconferencing by

satellite took place in 2006. Therefore, testimony takes place over long distances if the satellite link is available. The testimonies can be downloaded in Kigali to be transferred to local stations in Rwanda, this in order to increase the visibility of International Justice in Rwanda, which is an element to reinforce the process of national reconciliation between Hutus and Tutsis. The ICTR introduced 'ICTR by Satellite' to provide ICTR-related information for professionals working in television and radio and for institutions and persons interested in the ICTR legal process. 'ICTR by Satellite' is transmitted using a non-coded signal. This service is presently available in Africa, Europe, Asia and the Americas, offering live coverage from the Trial Courts, thematic raw footage and completed programmes related to the ICTR activities. It features:

- Live coverage in English and Kinya-rwanda and also if requested in French
- Live coverage of pre-trial and trial proceedings in each of the Trial Chambers.
- Live coverage of pronouncement of judgements and sentences.

The service is entirely free of charge and may be shared for non-commercial purposes (information or educational purposes where no charge is imposed by the distribution), with prior permission of the ICTR. News agencies and TV networks all over the world use the high quality video and sound of very high professional quality. The ICTR is broadcasting live to Kigali all judgments and other proceedings. However, the Rwandan TV has no technical means to downlink the signal. Therefore, the ICTR headquarters in Kigali downlink the material live and record on tape, offering recordings to the Rwandan TV. The technology is there, but more experts and funds are needed to cover the running and maintenance costs to support the completion strategy. Currently ICT can deal with the most important priorities. Several projects were launched to reach out to the people 'in the field' (in Rwanda) but these were abandoned on the one hand, when research and development questioned technical feasibility, but mainly because of limited staff and funds.

8.3.4 THE INTELLECTUAL CAPITAL OF THE ICTR

According to a key informer (FRR18) the ICTR is a multi-cultural and trans-disciplinary operation. The 'engine of the car' is a common understanding that people cannot get away if they abuse human rights and that no military or political leader may be guilty of such

contact. *Jurisprudence* is practiced to support human rights. Furthermore, democratic principles and a service mentality, not power, spiritually energises every person in the organisation. By November 2006, 1 040 staff members were employed by the ICTR, a complex system with mechanisms that cope as it grows. Diversity brings in new ideas from all over. To harness these ideas is a challenge and facilities must be provided to do that. Unfortunately, technology could not keep up to support this. In the UN system there is very little room to play around with ideas because of the many rules and principles. However, in the Chambers there is more room for manoeuvring.

According to a second key informer (FRR19), the ICC-system is trans-national in terms of judges provided by member states and legal systems. The ICC is therefore enriched by judges from different criminal law and civil law systems, over and above dominating systems such as the Common Law of the UK, which is based on Roman and Anglo-Saxon law, sharing their experience of practicing objectivity. They are supported by logistical, paralegal and administrative expertises. Eventually knowledge in the ICC system starts from a universal abstraction to incorporate local or international concepts on the concrete support level. International justice is a relatively new phenomenon in the world. It is realised that local court jurisdiction may be limited by resources. However, a common denominator is finding justice. The means to this end is different.

According to the key informer, in the ICTR the Western model of production is assumed, for which supportive intellectual capital is needed, for example paralegals and investigators to support lawyers and knowledge professionals to structure knowledge systems to save time. General Service personnel are needed from the country where the institution is based, e.g. drivers, secretaries, and translators with the appropriate educational background and sensitivity to act pro-activeness and the seriousness to resolve problems. A problem of operating in Africa is the loss of intellectual capacity because of an exodus of experts. The labour market in Africa is not attractive. Structural support is not enabling and conducive to learning. The basic conditions are there, e.g food, accommodation and health facilities, but although the industrial society is producing goods, it needs technical skills. Examples are medical professionals, doctors, lawyers and educators who leave Africa. Teachers and educators are of vital importance on village level to stabilise society. The young generation must be empowered to fill the intellectual gap. Engineers, builders and

plumbers are needed to combine knowledge and skills to effect the reconstruction of Africa. Productivity on the African continent is linked to knowledge.

KM supports the 'common cause'. The identification of capable people from a knowledge pool is the ideal. The criteria for belonging to the pool are important. Support staff must be diversified in terms of geographical diversity and the advancement of women. Specific skills like those of translators, security staff,' and base administrators' with multiple skills and inter-disciplinary ability, are needed. UN experts with an understanding of the system who are adaptable to a trans-national environment must be in key positions. The ideal person should be an innovator with a will to meet targets.

According to another key informer (FRR22), the ICTR has 893 staff members. In terms of geographical diversity, 86 countries are represented in the ICTR, 49 countries from outside Africa and 37 from the continent. The ICTR's staff development and training policy are based on the principle that building and maintaining the professional and managerial competence of staff are important priorities, as these represent a critical investment in the future and programme delivery of the ICTR. The secretary-general has stressed that in a time of rapid change there is a need to build a multi-skilled versatile and mobile international civil service and an organizational culture that promotes managerial excellence, high performance, and continuous learning. The staff development and training policy contains a wide range of development and learning opportunities for staff members at all levels. Global training programmes include leadership, management and supervision, team-based workshops, gender and diversity issues in the workplace, conflict resolution, human and financial resources management, career support and development upgrading of substantive and technical skills.

Skills improvement and communication programmes and a pre-retirement programme are designed to build a culture of shared values, and standards throughout the organization. These programmes aim to strengthen the core values, to develop organisational core and managerial competencies and to build the substantive and technical skills required to meet the changing needs of the organisation and, in so doing, enable staff members to fulfil their individual career aspirations. (ICTR 2006, i-iii).

In support of these objectives, the ICTR has identified five areas in which training is mandatory.

- Orientation/Introduction
- Computer Systems
- Language training
- Management and Supervisory Skills improvement programs
- Cross-Cultural sensitization training on understanding and working in a crosscultural environment is mandatory for all staff. Training programs in this area will include gender and diversity issues in the workplace, and conflict resolution.

According to a key informer (FRR 17) when a lack of ICT knowledge is discovered it is improved through the recruitment of experts to improve efficiency. People are doing things differently but it is also sometimes a strong advantage to mix different cultures. To overcome this, staffing must be done properly and the structure must be relevant. The problem becomes worse because of the pressure on the ICTR to complete its mandate. The right people are not interested in short-term commitments and there is a total lack of training programmes in ICT technologies for the local audiovisual staff. For the international staff, some group training is organized but there is very little training. What is needed is a strong structure allowing for freelance experts to overcome the different levels of training. Budget constraints are also a problem. People do not see the need for investment in a short-term project, despite the issue of moral obligations.

8.3.5 THE SOCIAL CAPITAL OF THE ICTR

According to a key informer (FRR16), the international political dimension, which influences the ICTR, involves many actors: Prominent actors are the French, the Belgians, the Americans, the British, the Congolese (DRC), the Burundians, the Tanzanians and the Ugandans. According to the key informer, besides its core mandate, which is of a judicial nature, the ICTR also has a 'non-core' mandate. Its work must contribute to peace and the national reconciliation process in Rwanda and the neighbourhood and give an account of this to all external actors, as well as the victims. The judicial output feeds into this external system of actors, including the bringing of a message to Rwanda that justice has been

done, to serve as reminder for the people not to do the same again. During the genocide, Rwandans did the killing but were supported and facilitated by international powers who failed to intervene. Enabling devices were needed to prepare for the genocide. The major powers of that time provided the devices. The UN system is a co-perpetrator of the genocide because of its lack of action against a history of failure and abandonment. The international community now takes responsibility for that failure in a hypocritical fashion. President Paul Kagame's response to the 'victor's justice' argument is 'where were you when it happened?'

The statute of the ICTR requires UN member states to cooperate with the ICTR's investigations and the prosecution of accused persons. Member states have assisted the ICTR by arresting accused persons, providing prison facilities for the incarceration of persons convicted by the ICTR, facilitating transfer of witnesses from their territories and voluntary donation of other material assistance. The cooperation of many countries has been one of the main reasons for the progressive success of the ICTR. The ICTR is staffed by more than 90 different nationalities and the presence of such a strong international work force emphasises the United Nation's commitment to help establish justice and peace in Rwanda. (ICTR 2006, 27).

Much depends upon the ultimate success or failure of the ICTR because it deals with crimes committed in Africa. The ICTR's work provides important precedents for the future ICC and various national jurisdictions, making a fundamental contribution to international peace and justice in the 21st century. Therefore, the ICTR continues its proactive public awareness campaign through seminars and exhibitions worldwide. Journalists from various countries in Africa and international news agencies have been invited to cover important events in order to generate awareness of the ICTR's activities. In doing so, the ICTR seeks to disseminate information about the key role of the ICTR in the development of international criminal *jurisprudence*. The prosecutor has also visited a number of member states of the UN with a view to securing their political support and cooperation for the arrest and transfer of fugitives. (ICTR 2006, 36).

Other 'inputs' into the ICTR system are from experts from the UN. An example is information on the involvement of the Department of Peace-keeping Operations (DPKO) of the UN before and during the genocide, including information from General Roméo

Dallaire and other senior officials of the UN Assistance Mission for Rwanda (UNAMIR). Their testimonies are not easy to get, as the UN subjects them to restrictions and their sensitive knowledge is often classified information. General Dallaire received a special waving of immunity in order from him to testify. European countries provide assistance with arrests and the enforcement of sentences and may serve as 'willing states' to receive cases if some of these cases at the ICTR cannot be completed before the end of its mandate in 2010. (FRR16).

African countries contribute in terms of arrest assistance and enforcement of sentences, whereas the AU contributes in terms of resolutions in support of the ICTR. Several countries in Africa are cooperating with the ICTR in the execution of its mandate. The accused in the custody of the ICTR have been arrested and transferred from more than 15 countries in Africa. The ICTR prefers enforcement of its sentences in Africa, for socio-cultural reasons and the deterrent effect thereof. On 12 February 1999 the Republic of Mali became the first country to sign an agreement with the ICTR to provide prison facilities for the enforcement of the ICTR's sentences. On 26 August 1999 Benin signed a similar agreement. Negotiations with several other African countries are nearing conclusion.

Concerning the Great Lakes context, a key informer (FRR 16) reiterated that Uganda was the birthplace of the Rwandan Patriotic Front (RPF), which consisted of former Rwandan refugees, and members of the Rwandan Tutsi Diaspora. Some of them became military men who supported the struggle of President Museveni. Before the clash between the armies of Uganda and Rwanda in Kisangani in the DRC, Museveni was a very strong supporter of President Kagame. Their fall-out still has a heavy impact on the current relationship between the two governments and leaders. People believe that the 'son' (Kagame) has turned against his 'father' (Museveni).

8.3.6 EVALUATION

The ICTR is a creation of the global community in reaction to the severe breach of values and threat to the uppermost consideration of the Western world: the creation of wealth as part of the ideology of capitalism. The international community had to react to the threat of a failed state that would threaten these values, especially after inadequate action during

the genocide. The involvement of the trans-national organisation is therefore driven by a combination of psychology of guilt and economic motivation within a context of international political dynamics. The challenge is to reconcile these drivers with the expectations of Rwandan society, which appear to overlap with the expectations of capitalist society, but remain at the lower end of power-relationships in the context of the international political arena.

The KM of the ICTR is driven by an international legal framework, formal strategies and KM specific policies and procedures. KM is an integral part of a completion strategy and business plans and is allocated dedicated financial, human and physical resources to ensure that the complete continuum of KM is implemented within the organisation. Furthermore, the internal organisation is suitably structured to manage the flow of data, accumulation of information and the outcomes of the process. Liaison plans to reach actors in and beyond the organisation are formal and pursued aggressively. In the case of the ICTR, 'corporate responsibility' and sometimes corporate interests (in the form of proving to the world that an international judicial system can be successful) and the subsequent urge to meet the expectations of 'stakeholders' are the overarching driver of the process as a whole and subsequently also the KM practices of the ICTR.

When the knowledge foundation of the ICTR is scrutinised a divergence between the requirement of meeting the expectations of Rwandan society and corporate interests is identified. Rwandan society must see justice to be done, while the ICTR needs to show both Rwandan society and a critical international community that it serves the ultimate purpose of reconciliation. Currently the involvement of Rwandan society is insufficient for establishing a CMG or a lasting synergy of values. A divergence of values is detected with Rwandan society leaning towards the need for the establishment of values such as togetherness and humaneness, while the value systems of the ICTR lean towards the values of *jurisprudence* and human rights. Although these value systems are not mutually exclusive, the question of national political interests of Rwanda against international political interests, points to a divergence of interests. This divergence prevents the collectiveness of knowledge and subsequently leads to the absence of a holistic picture.

A further divergence of interests is detected when the national strategy of a specific actor (in this case France) diverts from the mandate of the trans-national institution (ICTR) and

the main actor (Rwanda). The result of this rift is the obliteration of any possibility of finding reliable knowledge of what happened.

It appears that in chambers fusion of knowledge takes place in the form of evidence by witnesses, who represent the views of Rwandan society on the causes, course and consequences of the genocide. What is seen here is an effort to merge the perspective of witnesses, mostly from an African cultural background, with modern judicial principles and practices to form a judicial perspective as an additional perspective to those represented by religious, political and traditional knowledge claims associated with the 'pillars' of society.

The gathering of traditional African knowledge is seen to be reliant on the evidence by witnesses and accused as given according to internationally accepted legal principles. Data are gathered by an investigation unit, which is organisationally part of the ICTR. From reading the content of court cases it appears that very little is said about the spiritual and psychological reasons for the killings, except an intense feeling of hatred for another ethnic group, which led to genocide. Data are therefore based on facts as articulated by observers and not always originated from village level through traditional reconciliation methods, as in the case of the Gacaca courts.

The mandate of investigation allows the ICTR investigators to gather information beyond the resources of internal chambers, researchers, or analysts, mandating prosecutors to broaden the scope of information to work in the communities of Rwanda, using the means of any strategic partner. This powerful mandate means that the investigators of the ICTR enjoy the opportunity to plug into the oral tradition and collective memory of Rwandans, only limited by the level of mutual trust and respect and experts available to perform the task.

Measures such as witness protection and plea-bargaining are instituted to encourage trust, but will probably remain problematic taking into consideration a society that is characterised by distrust and has lost its dignity at some stage, as well as persistence of racist ideology and disrespect for people who are different. These and other challenges resulted in slow progress. A few successful cases prompted the completion strategy, including a comprehensive public relations strategy to lure witnesses and to ensure the

continued support of international sponsors and the redeployment of resources to expected focus areas within a framework of time constraints.

It is, however, on the level of collective knowledge that the ICTR creates a framework for a CMG by means of globally accepted legal principles and practices, between African society (Rwandan society and all influenced by the genocide), the legitimate government (Rwanda) and the trans-national organisation (the ICTR). However, the issue of power-relationships between the Rwandan government and African institutions calls for investigation and the question whether all worldviews are represented in findings is still open for further research.

It appears that the ICTR is structured to manage information in a decentralised way, depending on the type of data. In some cases, protection of information is a key consideration. Centralisation of information takes place in the international and public relations environment as part of an 'outreach' plan, but excludes privileged information such as case data or evidence, which is kept in the Judicial Records and Archives Unit, which is not accessible to all. A clear distinction is therefore detected between information for public consumption and information needed for the 'line function' of prosecuting. A third set of information is identified as information that is needed for management decisions within the ICTR, mostly decentralised to where management responsibilities are situated.

When the data on the Information Section of the ICTR is evaluated, it is found that it serves as a knowledge centre for the ICTR in that it facilitates the flow of information to the environment external to the ICTR, including its main 'customers', the population of Rwanda. To achieve this, ICT is used extensively to reach the audience with several tailor-made knowledge products. However, what are amiss in this case, are the views of the Rwandan population on what is produced by the media and inside the ICTR, limiting the inputs of African society to the witness stand. Especially the use of a European press service points to the limited inclusion of inputs from African society.

The absence of collective knowledge is evident. Subsequently the knowledge of the conflict as articulated to the population of Rwanda represents the view of the ICTR and the rest of the global community. The view focuses mainly on international justice as a means

to resolve conflict. However, the use of decentralized information centres in the affected communities provides the opportunity for the society of Rwanda to contribute to the body of knowledge from a community point of view, through academic publication. This however, does not resolve the need for community-level contribution to knowledge of what happened in Rwanda during the genocide.

ICT plays a crucial role in the ICTR as a typical example of the ICT-driven trans-national organisation. Nowadays all information systems are computerised and able to communicate with other centres outside Arusha, e.g. New York and Kigali. Computerised systems enable the organisation to make all data available for a broad array of experts and managers to analyse it, and to write value-added reports to promote understanding of the mandate, objectives and activities of the ICTR, to make decisions, to learn or to prosecute. ICT also facilitates the trade-off between confidentiality and sharing by ensuring timely disclosure and access within the ICTR, and to make what is eventually articulated in Chambers visible and audible to those who have access to technology and can freely distribute it to those who have not, if they choose to do so. Constraints on the use of ICT are however demonstrated and it has been confirmed that the successful use of ICT for KM depends on human expertise, funds for implementation and maintenance of dependable technical infrastructure.

It is at this point that the importance of intellectual capital for KM becomes an important variable. To manage the knowledge of the trans-national organisation or business, internally or in a common area, requires that a diversity of ideas as well as spiritual-psychological energy be harnessed. If those ideas focus on the values of serving society or humanity in an atmosphere of trust and respect, or/and to promote the universal values of peaceful humanity, successful harnessing of intellectual capital becomes viable, even without ICT or technocratic procedures and regulations. The ICTR, and especially the activities of the chambers proved to be a powerful COP where intellectual capital from all over the world is mustered.

In chamber, intellectual capital is mostly representative of Western, especially Roman, Anglo-Saxon and modern British common law. The traditional African concepts of justice are not formally observed in chambers, although some practices such as plea-bargaining in exchange for disclosure display some similarities. It is accepted that the traditional

knowledge system or 'indigenous common law' is not formally considered as a valuable knowledge input into modern court proceedings. However, African intellectual capital is present in the form of defence lawyers, judges and prosecutors, most of these minds containing cultural understanding and trans-disciplinary insight and positive perceptions about African culture that may guide their arguments and influence decisions beyond expert legal knowledge. It is also outside the Chambers that value-based leadership becomes of vital importance for finding common ground with the cultural environment, the ICTR is operating in.

The loss of expertise from Africa to the industrialised world, especially those sectors that enjoyed Western education, is a result of instability in Africa. Therefore, many Westerneducated people get involved in the trans-national environment as soon as they develop a level of expertise that is sought after by that environment. This may mean a loss of intellectual capital to society if they emigrate from Africa, but it also may mean that African society could exert influence in the trans-national organisation once a member of society is accepted into that fold. This would be unsuitable if, for instance, expertise from Rwanda is only allowed on supportive or technical level. Rwandan society may insist that visionary leaders, competent managers and facilitators, expert knowledge workers representative of society (not only government) becoming involved in joint working groups in the ICTR, where they can participate in a horizontal relationship with similar leaders, managers and experts to build cases and to prosecute. In this way African society (in this case Rwanda) can assert itself in the modern trans-national institution for not only the immediate purpose of seeing justice done and preventing further conflict, but also towards self-empowerment, competitiveness and a new convergence with the rest of the global community, as represented by the ICTR in Arusha.

The concept of an 'inter-disciplinary and representative knowledge pool' of intellectual capital consisting of productive and innovative leaders, managers and experts from within African society is a viable idea if selection from this pool for involvement in the transnational organisation is not prescribed by the transnational organisation. The notion of giving preference to members who owe loyalty to the transnational organisation should be rejected as destructive of mutual trust and finding common ground.

Involvement in the trans-national organisation means entering a culture of learning, which becomes more valuable the more common ground develops and the more access to intellectual and social capital develops. The opportunity presents itself to African society to enhance professional and managerial competence, become multi-skilled and adaptable, and to learn from a culture that promotes managerial excellence, performance value-based learning, and the maintenance of standards required for service to others. This does not necessarily mean mobility away from traditional society or service to the community and the replacement of the values of Ubuntu and other cultural traits unique to Africa with Western values. It also means enriching those values by learning from the way positive universal values such as peace and harmony, mutual trust and respect, and humaneness is implemented by other cultures. It implies the crossing of psychological boundaries to participate as equals in a common ground towards finding solutions.

If Africans accept that involvement with the trans-national organisation may bring new learning and career opportunities, they may find that though the organisation is tolerant and even friendly towards already qualified experts from the community, the organisation discriminates between local staff and international staff when it comes to learning opportunities. This prevents equal sharing in a horizontal relationship and promotes continued dominance of the international organisation in a collective common ground. In the case of Rwanda, the ICTR plans to train judges for Gacaca and allow internships of Rwandans in the ICTR showing a willingness to overcome this constraint, but the impediment of a UN system will probably not allow complete equity, at least in practice, of opportunities for local and international staff employed by the organisation. Furthermore, Rwanda, and probably most indigenous societies, would be reluctant to allow indigenous understanding to be replaced by a value system that obviously exercises dominance.

It was found that the ICTR is a centre in the global knowledge network, linked not only to other centres of knowledge in the Great Lakes region or the rest of Africa, but also the global network system introduced by the UN system. Joint management of the conflict in Rwanda is made possible by extensive social capital in the form of member states of the UN. After the failure of the member states to intervene and prevent the genocide, states became involved with renewed vigour in the post-conflict reconstruction of Rwanda. However, the need is still there for awareness campaigns to ensure that the Rwanda issue

remains on a very busy international conflict management agenda and is supported by member states. It appears that the purpose of the ICTR is not only to assist with conflict resolution in Rwanda, but that it also serves as an experiment to learn and develop international law.

8.4 THE CMG BETWEEN THE ICTR AND RWANDAN SOCIETY

The ICTR mandate encompasses the fundamental role of the rule of law, under which people found guilty are held accountable for their offences, to promote national reconciliation, and restore peace in the Great Lakes region of Africa. To achieve these aims, it is essential that the target group of the ICTR, in particular the Rwandan people, have a clear understanding of the work of the ICTR. This implies a sustained strategic communication programme using a range of techniques, varying according to the audience addressed, to explain the work of the ICTR and its relevance to Rwanda and the international community (ICTR 2006).

8.4.1 OUTREACH BY THE ICTR

According to a key informer (FRR 16) 'the Outreach Programme' of the ICTR tries to reach actors with a similar message so that they provide resources for the ICTR to continue the work and that they internalise the lessons learned from the ICTR, to avoid any repetition in the future. In the network output, Rwandan society is seen as 'critical' to receive the message. The global media and staff members are high priorities. The 'Friends of the ICTR', interaction on ambassadorial level, NGOs, other international foundations and the private sector are moderate priorities. The legal and military professionals are low priorities. In the network, the focus is on the critical audience (Rwandan society) which must be kept at a close distance. Relationships with other international partners gravitate around the ICTR with a constant change in power relationships and communication distances.

The ICTR has also embarked on outreach to diverse audiences, using various communication channels. The programme's focal point is the Information Centre 'Umusanzu mu Bwiyunge' in Kigali. The information centre was inaugurated in September 2000. The Outreach Programme provides a range of opportunities to increase public

understanding of the ICTR's work through briefings and films. The Information Centre facilities are fully utilized by the Rwandan Public, particularly students and researchers, who wish to get first-hand information about the ICTR. The Centre is also a venue used by different institutions to host various seminars, meetings and press conferences. At present, the Centre receives more than 100 visitors per day, including students, journalists, civil servants, judges and lawyers as well as ordinary citizens from all occupations. The Centre also disseminates the ICTR's public information documents to approximately 100 institutions in Rwanda. Direct access to audiences through publications and other material provides Rwandans with first-hand information about the ICTR's achievements and policy. Eight computers are at presently available in the library, and a collection of video archives of trial proceedings before the ICTR is particularly popular. A steadily increasing range of documents in Kinya-rwanda is also available. Other activities, such as press conferences, briefings and film shows take place at the center. (ICTR 2006).

During a field research visit to the center in Kigali on 24 November 06 it was observed how several scholars were using the centre to do research. Apart from all the most important literature on the conflict in Rwanda and Internet facilities, the center even contains a facility where students can write assignments. The vision is to establish similar centres elsewhere in Rwanda with the assistance of the European Union.

Groups of up to six Rwandan journalists are regularly brought to the ICTR by the UN aircraft from Kigali in order to get first-hand information and report directly on important events such as the delivery of judgement, appeals chamber sittings, and the commencement of new trails. Radio and television journalists are provided with audio or video cassettes of hearings for broadcast by Radio Rwanda or Rwandan television. Judgements are broadcast live in Rwanda by means of a dedicated telephone link to Radio Rwanda. Interviews are granted whenever necessary. The ICTR provides an international independent media organisation with video materials used to produce and show documentaries on current Rwandan post-genocide justice. Since 2000, more than 40 Rwandan judges from courts all over the country have attended a series of weeklong seminars in Arusha. More seminars of this kind are planned. Several professors from the National University of Rwanda in Butare continue carrying out research at the ICTR in Arusha. An annual programme or research awards for National University or Rwanda students is now in its fourth year. Each year, up to six students from the National University or Rwanda spend eight weeks

working at the ICTR. Despite its achievements, the ICTR still faces the challenge of informing Rwanda's rural population of its progress. The 'Umusanzu Centre' can only receive people who live in, or are able to travel to Kigali. It is envisaged that outreach activities will be expanded to provincial levels. This project will engage key target groups, inform them about the ICTR, mobilise them to promote human rights and foster the culture of accountability inside and outside Rwanda. (FRR24).

The ICTR in collaboration with the Centre for Conflict Management of the National University of Rwanda organized a conference on challenging impunity at the Kigali Novotel Hotel from 7 to 8 November 2006, during which they established how Rwanda can continue beyond the ICTR. In his opening statement the chief prosecutor of the ICTR, Mr Hassan Bubacar Jallow, affirmed that the ICTR and the National University of Rwanda were able to work together to organise the important forum on combating impunity. He added that in the last few years, the need for increased dialogue had been apparent to ensure a proper completion of the process. Mr Jallow said that even though the ICTR intended to close down its operations as planned, the war against impunity was permanent. He said that Rwanda continued to be the focus of the ICTR for the transfer of cases for trial, where the involvement of Rwandans in the work of the ICTR at all levels would be anticipated. He said that at the end of the ICTR mandate an arrangement would be made that would facilitate the access of the Rwandan people to the extensive archives of the ICTR. (ICTR 2006).

8.4.2 CONSTRAINTS TO THE CMG

According to a key informer (FRR 15) who attended the conference, cooperation with the ICTR was found to be problematic. The Outreach Programme avoids joint working groups and organised COP because of divergent political views. Furthermore, the work of the ICTR cannot be seen in isolation from social implications. A technocratic approach is followed by the ICTR, which does not provide for a common vision of accountability. International *jurisprudence* dealing with human rights assumes that bad people violate human rights. In the case of Rwanda, the reasons why some people even killed their own family must be found. Perpetrators must recognise that they did wrong. They must recognize that they committed crimes against themselves and their own country. In the ICTR there are different views of wrongdoing, e.g. those seeking justice for humankind

against the Rwandan barrister who must meet the expectations of Rwandan society. The ultimate output is 'history under oath' as an important dimension of a future identity of Rwandan society.

The key informer is of the opinion that since the collection phase has been completed, there is no proper sharing of information with the ICTR by Rwandan society. The ICTR is judging from a practical point of view. The results are that not even 30 cases have been finalised. According to the ICTR, a plea of guilty shows readiness for reconciliation. Furthermore, the level of revealing the truth in the ICTR is very low. The distance from where the crime was committed is too big. The ICTR also suffers from cultural and language barriers ('translation is betraying'). Therefore, the ICTR cannot meet aim of reconciliation. Gacaca also has the advantage that it operates on a normal departmental budget, whereas the ICTR is very expensive and relies on international donors.

The indictment by the French of President Kagame has affected the ICTR situation, as many defence counsel and human rights organisations called for the ICTR to investigate, indict and prosecute President Kagame and his associates. This increased pressure on the ICTR prosecutors and judges. This will certainly influence the future historical view of the ICTR achievements after completion of its mandate at the end of 2010. Some people are of the view that the indictment of President Kagame by the ICTR would have a serious impact on the ability of the ICTR to conduct its trial proceedings peacefully and effectively, as witnesses from Rwanda might not be able to travel to Arusha for giving testimony. The most important question is whether the ICTR has the mandate to try the kind of crimes involving the shooting down of the former president's plane that President Kagame and his military associates are indicted for by the French investigative magistrate.

According to another opinion (FRR 29), the reaction to France was a direct result of the interference of France in the judicial processes of Rwanda. The issue now is sovereignty. Rwanda does not see itself as subjects of Arusha. No country has the right to interfere in the judicial processes of Rwanda. For instance, the government refused to accept training of judges by the ICTR.

According to a key informer (FRR 15) a showdown between the government of Rwanda and France will destroy cooperation between Rwanda and the ICTR ('the middle ground').

The ICTR, a pristine value-driven institution will become a political institution and a casualty of the fight if the institution becomes involved in the Kagame indictment issue. The ICTR is confined to *jurisprudence* and the use of legal knowledge and is assessed as a legal institution. Lawyers and judges cannot venture into the political arena. The ICTR should be void of political membership. When people are recruited, they are international civil servants, but a hybrid of the political entities they come from and preach from their own society. The people at the ICTR are not supposed to support any national ideology, as it will discredit the institution. There are multiple agendas among managers and staff at the ICTR. That may lead to paralysis. Furthermore, France is a permanent member of the UN Security Council and very powerful. The indictment of Pres Kagame by the French Judge during Nov 06 became a political issue.

8.4.3 EVALUATION

The ICTR recognises the importance of finding common ground with the people of Rwanda. Therefore, continuous efforts are made to cross the psychological boundary and the physical distance between Arusha and Kigali, not only by means of technology but also through physical presence in Kigali. The Information Centre in Kigali is a good example of a 'collective knowledge centre', which not only serves the purpose of outreach and providing information to the people in Rwanda, but has also developed into a facility where new knowledge is produced. In the centre, researchers from all sectors of the community in Kigali are exposed to different perspectives and are free to make their own conclusions on what really happened, resulting in a synergy of interpretation.

In the Centre, the opportunity for equal sharing of knowledge is created in the sense that knowledgeable people of Rwanda can now merge their own knowledge as observers and participants with the perspective presented by a distant trans-national organisation. Furthermore, the dominant relationship of the trans-national organisation is alleviated by the proximity of indigenous knowledge outputs of the Gacaca and informal knowledge inputs by visitors and participants from Rwandan society. The centre is primarily a knowledge creation and learning centre, but the knowledge products of people involved in it may prove to be of significant value as renewable knowledge products on which conflict prevention action can be taken.

Unfortunately, it appears that the centre and other efforts to establish collectiveness do not go all the way towards finding common ground. After the initial collection of information phase and processing of information in order to build cases against accused, new knowledge emerges because of information under oath. It appears that this valuable information would only become useable knowledge once cases are concluded and the full findings are released for broader society to use it for policy purposes.

The value of the knowledge products must not be overestimated. The constraining influence of divergent political views within the ICTR, the scientific approach that marks international *jurisprudence*, the physical and cultural distance from where the genocide took place, plea-bargains that prevented full knowledge to being disclosed, and budget constraints on thorough investigation must be considered.

Therefore, KM in a common ground would imply that the results of the Gacaca system and the outcomes of the ICTR are merged and interpreted under joint control of representatives of broad Rwandan society and trans-national organisations (including the UN and AU) to establish a series of knowledge products with a holistic perspective. Such a product could contain a set of indicators that could provide early warning of another genocide or violent conflict in Rwanda or the Great Lakes region. Synthetic products could also be produced to formulate new legislation, policies, strategies and plans to intervene in the cycle of deprivation, frustration and aggression that caused the genocide. Moreover, such a knowledge product would also serve to manage jointly the consequences of the genocide to reach long-term conflict resolution, national reconciliation, and rehabilitation of all in Rwanda society.

However, until the merging of explicit information can be effected, the production of knowledge will be limited to the tacit synthesis of interpretation of those minds that succeed in finding common ground and to reach a holistic perspective of what caused the genocide, what happened in the course it followed, and how the consequences should be managed. Furthermore, decisions and actions on how to prevent further conflict will probably continued to be influenced by emotional and commercially motivated literature on Rwanda that became popular sources of reference.⁹

⁹ See Dallaire, R. 2003. *Shake Hands with the Devil. The Failure of Humanity in Rwanda*. Random House Canada; and Koff, C. 2005. *The Bone Woman*. Random House Canada.

The primary knowledge output that is shared with the global community would probably be a comprehensive report on the causes and consequences of the conflict and on how *jurisprudence* served as instrument of conflict resolution. Despite the advantage of being supported by the UN system, it appears corporate interests supersede justice as is seen in the withholding of evidence where UN officials are involved. Especially in view of the UN failure during the genocide, seen as some as a joint perpetrator because of that, one can only speculate on what valuable information is hidden within the privileged UN system that could have shed light on the occurrences of 1994.

The knowledge product delivered by the ICTR is legal-specific, but contains a synergy of interpretations and holistic perspectives that can be used as a synthetic product for the formulation of policy and strategies to prevent conflict and genocide from occurring again. Furthermore, the knowledge of the ICTR will also provide useful indicators for early warning of conflict and genocide to enable quick response to prevent it. Moreover, the body of knowledge contributes to the healing and reconciliation process in Rwanda, while meeting the expectations of the UN. The balance of advantages for the political agenda of the Rwandan government, human insecurity in Rwanda and the global values of human rights and peace remains open for observation. It is observed that a shared vision of stability in Africa and the marked cross-cultural cohesion in the ICTR lie at the foundation of collective KM.

The confrontation of France places the conflict prevention and national reconciliation efforts of Rwanda and its strategic allies such as the ICTR, within the arena of international politics. Although the Cold War situation where major powers could be played off against each other by countries such as Rwanda is in the past, the contest of Francophone vs Anglophone for resources in Africa is not over.

Even if it was maybe not the intention, the indictment of President Kagame was experienced as purely a political act by France, aimed at the government of Rwanda, which controls access to data that is needed for legal procedures in Arusha. The reaction of the Rwandan government to France implies that the relationship between them would probably be characterised by pressure on Rwanda from France and its Anglophone allies, using an array of strategic means. Traditional French allies include members of the Interahamwe who have been hiding in the forest of the Eastern DRC since the genocide of 1994, after

they left there under French protection when threatened by the RPF rebels under Kagame, today the nucleus of the government of Rwanda. It is also apparent that France retained some allies in Rwandan society, mostly outside government, who may also be used to exert pressure on the Kagame government.

Other allies are present in the ICTR in the form of civil servants and legal professionals, who would find it difficult to divorce themselves from the foreign policy orientation of their home countries, especially if those countries have closed regimes that do not allow independent action of individuals in the global political arena.

Rwanda will probably react from the premise of sovereignty of the state, denying access to whatever inputs come from the Francophone world, including an increased suspicion of the ICTR. The current foreign policy orientation of Rwandan government towards the supportive social capital of the USA and Britain will probably be reinforced.

The risk emerges that different actors in Rwanda may align with different major powers in search of support, and that the influence of contesting major powers may manifest itself in the ICTR. There is a risk that the government may lose support from the mostly French speaking civil society, including the majority Hutus (an interest group that still exists despite national reconciliation efforts).

However, on the positive side, aligning with allies such as the USA and the UK will ensure access to the powerful conflict resolution and donor facilities dominated by those countries, including the knowledge network and hubs situated in those countries. Direct access to the knowledge hubs of the USA, South Africa, Ethiopia and others ensures that Rwanda will continue playing a role in the global economy, especially in view of its strategic position as a gateway to the mineral resources of the Kivus. Furthermore, it creates the opportunity for Rwanda to become increasingly involved in continental initiatives, with the support of the USA and Britain, including conflict resolution through the deployment of a professional army as peacekeepers or peace enforcers beyond the French sphere of influence.

It appears that in principle, African leaders accept the initiatives of the ICTR to restore and maintain peace in the region and relationships in general are supportive. However, suspicion of the 'Tutsi' government will probably persist as long as it remains in control of resources in the Eastern DRC, and the perception remains that it seeks to project military power into the Kivus through proxies, real or potential. Africa would probably take the lead from President Museveni when it comes to foreign policy orientation towards Rwanda. Suspicion of the Rwandan government will probably prevent full access to the wealth of indigenous knowledge connected to it, although its social capital, especially in the East Africa cannot be underestimated. On the other hand, the ICTR would probably continue to enjoy full support from African partners, only limited by resources and efforts by some Francophone partners to influence the activities of the ICTR.

If the influence of the dynamic trans-national environment on the Rwandan situation is analyzed, it is found that global and regional interaction of actors involved in the organisation may have a direct impact on Rwandan society and the ICTR as epistemes. In the case of the ICTR the relations between the current Ugandan government and the government of Rwanda, as well as the indictment of Kagame by France, may have a direct influence on the quality of evidence that will come before its courts and the ability of the ICTR to complete its mandate within the prescribed timeframe (end of 2010). Incomplete evidence may result in unsuccessful prosecutions and the consequent failure of the ICTR to fulfil its mandate. This could render any completion strategy obsolete.

In the case of Rwanda, pressure from France and its allies and tense relationships with neighbours could disrupt efforts to find the truth and effect reconciliation in society. Furthermore, it would severely impede the already low level of trust between the ICTR and the government of Rwanda, rendering cooperation in a collective middle ground, problematic.

8.5 FINDINGS

During fieldwork in Rwanda, it was found that the Gacaca court system provides a valuable example of an IKS that can be used for conflict resolution. The court system lends itself to the gathering of empirical data from the memory and narrative of the victim and other participants. Furthermore, the system allows for a structured way of maintaining an intra-connected relationship with broader society during which new knowledge is created. However, it was found that 'the spirit of Ubuntu' is not always prominent in the

modern Rwandan society, mainly due to persisting distrust among people and Western influence.

It was found that the traditional practices of Gacaca are reconcilable with the modern KM practices represented by the ICTR in Arusha. However, it was found that traditional and indigenous knowledge inputs are only used by both systems as evidence, and do not result in production of sufficient synthetic renewable knowledge products for decision-making on conflict resolution. The situation is mainly due to inadequate intra-connectedness and convergence in a CMG with a measure of distrust between Kigali and the ICTR, guided by current national and international political agendas. The equal complementary nature of IKS and modern knowledge systems exists, but call for further development of a common approach on how to prevent re-emergence of conflict and how to ensure restorative justice in Rwanda.

It was found that the ICTR does not succeed in contributing to KM for conflict resolution to such and extent that it would assist in the eradication of conflict. The gathering of evidence to prosecute within a modern legal framework, characterised by a vertical, distant and technology driven power relationship, appears to serve mainly the prosecution strategies and corporate interests of the organisation, as is the case with the broader ICC system. The ICTR produces very little current knowledge that could be used for early-warning and planning purposes. The need for the ICTR to continue and expand its good work to outreach to Rwanda society was identified for the systems of Gacaca and the ICTR to develop collective knowledge products that can lead to join and complementary action on equal grounds.

It was found that the social networks and intellectual capital of Rwanda, together with a system based on traditional Gacaca practices, provides sufficient opportunity for expected outcomes such as peace and restorative justice. However, the challenge is in finding common ground not only between Gacaca and the ICTR, but also with actors in the global community in an equal and complementary fashion without allowing distorted views brought by local and international political agendas.

CHAPTER 9: A TRANS-DIMENSIONAL KM MODEL (TDKM-M)

'There is nothing more difficult to take in hand, more perilous to undertake or more uncertain in its success, than to take the lead in the introduction of a new order of things.' -Machiavelli

9.1 INTRODUCTION

According to Van Dyke (1960, 105) a model contains a structure and form or other significant characteristics of what it represents. Figurative and suggestive symbols can be used to imitate a mental image. Explanation and prescription are added to represent a theory. However, if it is only that, it will not add to empirical knowledge and verbal models that are explanatory become indistinguishable from theory. A model must take on conception of the desirable, constituting ideal types and taking on normative or prescriptive quality, in other words it must be prescriptive theory. According to Gregor (1971, 192) some analogical models appears in the form of diagram of figures suggesting the structure or power relations and showing the exchange of flows providing analogical understanding. To have a more specific cognitive character a model must involve the generation of specific and testable knowledge claims as part of linguistic entities such as analytical schemata or axiomatic systems, and a deliberate explanation of semantic rules of correspondence. A model is rich in implications suggesting a new hypothesis articulated in a systematic fashion and subject to independent testing. It does not predict, nor confirm.

The purpose of Chapter 9 is to present a model developed from theory and field studies, which will not only explain particular observable facts and coherence between theoretical propositions about knowledge in Africa, but will also prescribe specific practical solutions about the management of knowledge by African society and trans-national organisations in the form af an appropriate model.

The rationale for the model is based on the conceptual framework (Appendix B) and findings of field studies as presented in Chapters 7 and 8, which articulated the challenges of KM in Africa and the principles and practices by which these challenges should be met. The structure of the model contains a set of propositions that represents the principles of trans-dimensional KM in a coherency to simplify understanding. Finally, the prescriptive

propositions of the model will be made transferable to the complete research population (Africa) and the trans-national business.

9.2 RATIONALE FOR A TRANS-DIMENSIONAL KM MODEL

During field research, the realms of KM, as was found during the pilot study, manifested clearly during the main study. The first realm involves collection of information based on confessions and investigation on village level, both in the cases of Gacaca and the traditional practices of conflict resolution of the Acholi. What is distinct here is the public nature of hearings as effective checks to determine the truth. The practices of traditional justice embedded in society and combined with modern practices, were observed. What is especially significant is that a new awareness has to be created of traditional practices to resolve Cold War- related conflicts and impunity.

The second realm of indigenous knowledge involves the broader context of society, visible in both Acholiland and Rwanda. Conventional modern justice systems are already formally integrated with the traditional system, political system and religions as part of one process. An advanced synergy has already been reached involving most actors with knowledge claims originating from traditional culture, religion, politics and modern justice. Traditional knowledge and the norms of Ubuntu already complement knowledge brought by the pillars of modern society.

The third realm of collective KM in a CMG, reflecting the importance of intra-action and interaction among centres, was identified. The role of the ICC and the government of Rwanda and relations between the traditional leaders of Acholi and the rest of Ugandan society are examples in this regard. Since the inception of Gacaca and the revival of the traditional system of Gacaca, the importance of intra-active communication has been realised and a workable system of communication was found in Gulu. Communication between Arusha and Kigali and between Gulu and the ICC appeared to be problematic for various reasons. It is in the CMG that the need for principles and practices on how to develop as complementary epistemological relationship, formal or informal, between entities to resolve conflict, were identified.

The fourth realm of social capital, manifested itself as a complicated network of 'stake-holders' who are involved in the quest for justice and reconciliation (e.g. the ICC and the ICTR), but who are also bringing new disruptive global conflict trends to the conflict resolution arena of the Great Lakes region. It is concerning the use of social capital for conflict resolution that the need for a model that would illustrate an intra-active relationship among global, regional and local entities was detected.

A fifth realm of meeting the expectations of the people of societies in conflict through the fusion of knowledge was identified. The expectation of lasting peace in both Uganda and Rwanda and the resulting transformative growth and reconciliations, call for effective intervention. Instruments such as the Gacaca court system and the international criminal justice system promised to be effective instruments, but whatever instrument is chosen would require the careful management of knowledge in the specific episteme through transcending the artificial boundaries between political science, epistemology and other disciplines. It would also require the eradication of boundaries among the people involved. The transcendence and eradication of boundaries need to take place according to specific principles and practices to be successful. A new model would be needed to demonstrate the dynamics of these imperatives.

Traditional knowledge practices provide a valuable framework for KM for conflict prevention and resolution. The thorough trans-dimensional gathering of data hidden in the interconnected cultural relationships in the traditional community, relying on oral tradition and collective memory, breaking out of structures to even unseen dimensions, constitutes an important component of indigenous knowledge in Africa that may reveal the causes, courses and consequences of conflict in Africa. These assertions pose a serious challenge to existing conflict resolution models that are mostly based on Western models as practised by international institutions.

To be of value for a new model, traditional knowledge must be accepted as legitimate and reconcilable with other knowledge claims in society and formally considered as part of a decision-making process. Participation must be voluntary and participants must believe in the reconciliatory effect of self-disclosure, compensation and ceremony. If enhanced by indigenous knowledge as a synthesis of knowledge and perspectives within the indigenous

society, originating from the 'pillars of society' (governance, religion, tradition and justice), valuable new perspectives emerges that warrants a new model.

However, the managing of indigenous knowledge for conflict resolution is impeded by constraints resulting from internal war, especially guerrilla warfare doctrine, and includes activities such as intimidation, killing of witnesses, and collaboration and deliberate obscuring of facts. In a formal structure, the flow of information may be subject to manipulation and control to reflect a specific official perspective. In a post-conflict society knowledge may be manipulated to ensure 'victors justice' or revenge for acts committed during the internal war or genocide. Personal interpretations based on an exclusive psychologically driven frame of reference such as exclusive spiritualism, racism or liberation ideology is not typical of an IKS but may lead to contesting perspectives on the nature of the conflict and perpetuation of hostilities. Practical issues such as indigenous knowledge being mostly articulated in the indigenous language or indigenised language and to access the knowledge, understanding of the specific cultural idiom is required, as well as forgetfulness that marks an oral culture, are also constraints on the use of IKS. Any new model must take cognisance of these constraints and requires the assumption that the ideal situation as described by the model would require specific management practices in order to overcome these constraints.

Therefore modern indigenous knowledge for conflict prevention and resolution may be centrally processed in a 'knowledge centre' situated in communities where the structured flow of knowledge in the community converges to be processed into tangible knowledge in the form of structured data-bases or documents, or a synthesis of interpretations that can be used and shared for conflict prevention and resolution. It is in the 'knowledge centre' that modern scientific method meets traditional knowledge to complement each other on equal footing.

Collective KM between the indigenous society and the trans-national organisation requires 'intra-connectivity', intra-activity' and collectiveness because of crossing physical and psychological boundaries. 'Intra-activity' implies that members of the society are active in the organisation, or members of the organisation are active in society. Intra-connectivity implies that the knowledge centres of the two worlds connect with each other. Collectiveness means the total merger of the physical knowledge centres of society into a

CMG to learn from one another, enrich one another's worldviews or to replace negative worldviews such as racism, exploitative capitalism and exclusivist religion with positive worldviews such as democratic principles or the principles of Ubuntu.

A 'Collective Knowledge Centre' is situated inside the culture it serves, in an equal partnership with joint control and co-ownership with the community, operating according to the values of trust, respect and peaceful cooperation. It means permanent settlement in the communities striking a balance between security and acceptance by the community. Collective KM can develop from intra-active joint working groups to an intra-connected COP to a permanent 'Collective Knowledge Centre'.

Where the international legal justice system is involved, it may entail a new legal dispensation where African legal experts intra-actively exert themselves in ICC institutions to apply justice, or ICC representatives trying cases in the community involved. Furthermore, it entails sharing of knowledge through representatives to enable society to resolve or prevent conflict and the ICC to fulfil its legal mandate. It also implies enriching a framework of foreign practices with the practices with indigenous or even traditional practices of applying justice.

The key role of 'higher minds' and value driven-leadership in conflict resolution in general and KM in a conflict arena, was reconfirmed. It both the Gacaca and the traditional system of the Acholi the role of religious leaders was prominent, especially in getting people together to talk and share experiences. In the case of the Acholi the role of traditional leaders in finding solutions to cope, brings a dimension to conflict resolution has apparently been forgotten since colonialism and during the Cold War. Today a new situation is emerging where leaders in civil society achieve synergy to find solutions based on traditional and religious values, as an alternative to conflict resolution according to official political agendas, which appear not to work.

When the value-based initiatives of civil society are combined with the wealth of intellectual capital contributed by the judicial fraternity (judge, jury and barrister), a body of knowledge characterised by trans-disciplinary insight and learning emerges. These trans-disciplinary insights need to be harnessed by competent knowledge managers, facilitators and expert knowledge workers in a COP such as collective knowledge centres

or joint working groups as discussed. In this regard, the concept of a 'representative knowledge pool' emerges, meaning a pool of visionary leaders, managers, facilitators and experts, representative of various disciplines, diverse cultures and both genders who can be called upon to serve in cohesive trans-disciplinary COP to resolve specific issues in a CMG.

Several political and civil society missions are in place to intervene into the quagmire of the conflict itself in an attempt to stop the cycle, as in Northern Uganda. Some efforts aim to do damage control by getting involved through 'post-conflict reconstruction', to prevent the cycle from continuing into a new conflict phase, as in Rwanda. Other initiatives aim to intervene in the cycle of conflict at the point of where the conflict originates to remove causes. Whatever the approach is, holistic knowledge is needed about the causes, the nature of the conflict, the full consequences and the risks of a renewed outbreak.

To assess the risk of renewed conflict, current knowledge is needed to provide early warning of the intentions of actors to pursue further violence, in order to prompt timely preventative interaction. To understand the dynamics of the conflict while it is in progress the wisdom of leaders and the knowledge of experts are needed to analyse, interpret and search for intervention opportunities. To manage the consequences of the conflict, such as e.g. post-conflict reconstruction programmes, the same visionary leadership is required, while the emphasis shifts to capable managers and facilitators to create a new synthesis of knowledge for policy and strategy formulation, to do detailed planning of projects, and then apply the energy to implement the projects. It is at the point where the action takes place that human knowledge and human energy is merged to use other resources, such as funds and technology.

The ideal output of collective KM is a synthetically renewable knowledge product containing a fusion of all knowledge claims as a basis for policy formulation, strategising and planning, or as early warning to prompt decisions and actions to prevent conflict. It can be in the form of reports of collective research projects by NGOs, CSOs, government departments or academic institutions involved in society. It can also be in the form of reports on evidence ('knowledge under oath') and findings after the conclusion of court cases or allowing access to archives and databases after a legal mandate has expired. However, the best practice is a synthesis of interpretations by a Collective Knowledge

Centre. The value of the knowledge product is reduced by the practice of protecting and withholding knowledge and the distance of the Knowledge Centre from the actual event and access to direct observers.

This ideal situation does not always appear to be possible. It appears in some instances that knowledge cannot be produced in a tangible format, but remains in the minds of people until it can be disclosed and made useful. It is in the oral tradition that narrative and symbolic gestures are preferred to 'writing down things', and people may feel uncomfortable with their thoughts being recorded. In some environments such as the legal and official environment, knowledge cannot be made public for reasons of confidentiality, and knowledge is not produced in its full consequences. This however does not necessarily mean that the knowledge cannot be used for decisions and actions, but only that it probably remains an isolated knowledge claim until subjected to scrutiny from a cluster of knowledgeable people.

In practice, KM in the context of the African Renaissance means the production of a synthesis of all knowledge claims in Africa into a tangible body of knowledge that would be suitable for implementing the already vast array of policies, strategies and plans associated with the African Renaissance, such as NEPAD and other initiatives. Among these strategies and plans are clear directions concerning peace and security. Knowledge is needed to activate those strategies and plans, in other words to get people to make defendable operational decisions and to act on the knowledge. As knowledge is a renewable commodity, and will therefore continuously reveal fresh insights into situations, decisions and actions also need to be flexible to accommodate these new conclusions on, for instance, solutions to conflicts in Uganda or removing the causes of the conflict in Rwanda.

The social capital of society evolves and develops because of conflict in society and efforts to resolve it. Actors tend to become increasingly involved as soon as their interests are at stake. Therefore, the different communities in society increasingly rely on support and even react to demands from supportive actors. Organisations such as the UN, AU and British Commonwealth brings with them a wealth of bridging social capital to conflict situations and in most cases provides the legal and knowledge framework for conflict resolution. The need to receive early warning or to get support for conflict resolution also

prompts actors to become involved in regional arrangements, enhancing the network of social capital.

Unfortunately with international involvement in conflict situations comes major power rivalry (such as between France and the UK in some cases) or intercontinental wars (e.g. the so called 'War on Terrorism'), sometimes using local belligerents as proxies to implement international conflict agendas. This situation leads to the reinforcement of negative values such as the ideology of genocide, racism, impunity, entitlement, a guerrilla culture and the quest for power dominance. Exclusivist interpretation of global religious practices has also proved to be a cause of conflict, or has failed to establish a value system that prevents conflict.

The immediate expectation of the African Renaissance is that the continuous spiral of violent conflict must change into peace and reconciliation. A first step after peace appears to be a need for justice, taking into account the need to restore normality where dysfunctions in society persist, and to reconnect people where connections were destroyed by conflict. The expectation is that this will lead to psychological healing, replacing the psychological causes of the conflict with the principles of Ubuntu, characterised by interconnectedness, togetherness, humaneness, respect and dignity. Only after restoration, reconnection and healing can the expectations of lasting human security, freedom to exercise human rights, production to relieve poverty and improved quality of life be fulfilled. The ultimate expected outcomes are self-emancipation from domination, transformative socio-economic growth, innovation in all aspects of life, towards a situation where African countries can project competitiveness in a global context in order to restore the historic disequilibrium and reach a new convergence with the rest of the world.

Justice to restore and to reconnect needs the careful reconstruction of events taking into account not only empirical evidence from eyewitnesses, but also seen against the background of knowledge perspectives, whether indigenous or otherwise, of the causes and circumstances in which offences took place. Psychological healing requires a holistic understanding of the impact the conflict had on the individual mind, an understanding that can only be created if the insights of traditional culture or the local community are merged with the findings of scientific studies. Human security can only be established and successful socio-economic development can only take place if knowledge of the challenges

and opportunities are collectively managed in a middle ground and applied by all actors who share the same vision. The ultimate expected outcomes can only be reached if the wealth of knowledge in Africa and can be combined into a new synthesis of innovative ideas.

Above-mentioned findings confirm the imperative of management of knowledge indigenous to Africa in a CMG by the trans-national organisation and African society. Moreover, the finding expands the middle ground concept to all knowledge-producing entities in a holistic order of interlinked social and intellectual capital. The findings supports the identification and formulation of a set of universal principles and good practices that, if implemented, could lead to a synthesis of knowledge that could prompt decisions and activate successful intervention that transcends the boundaries of multiple dimensional conflict situations. It is to illustrate the variables that the TDKM-M was developed.

9.3 PRINCIPLES AND PRACTICES

The literature study and fieldwork revealed the following principles and practices for the TDKM-M.

Normative Foundation. The normative-spiritual realm represented by the 'higher minds' in African society and all committed to it, where political ends, strategic goals and the expectations of society originate from the values of Ubuntu and the universal values of peace, trust, justice, social equality and searching for the truth. The term 'Higher Minds' refers to visionary leaders, capable manager-facilitators and expert knowledge workers who can work in joint working groups or COP characterised by cross-cultural cohesion, crossing mental and physical boundaries into a trans-disciplinary realm towards a synthesis of interpretation and synergy of activation.

Holistic Order. The fundamental order of global inter- or intra-activity among all entities, implicating one another in a holistic bond manifesting in an intrinsically woven balanced inter-connected or intra-connected network of knowledge clusters managing knowledge within each other and as part of each other. A new fusion of trans-dimensional knowledge is the result of the processing of knowledge claims by intellectual capital in the entity as

knowledge flows through it, continuously renewing knowledge and using the network as social capital to improve humankind. Protective mechanisms are flexible or abandoned to allow for fusion of interpretations, allowing maximum sharing while protecting own interests.

<u>Collectiveness</u>. Collective KM involving the harnessing of the collective memory of the village community, processing of indigenous knowledge together with the indigenous society and collective management by the trans-national organisation and African society in a CMG. Collectiveness requires an atmosphere of mutual trust, respect and acceptance of the equity of all worldviews/perspectives without concern that one perspective is superior or inferior to the other.

Activation of Intervention. Trans-dimensional insight into the causes and effects of phenomena such as conflict that activate a synergy of interventionist initiatives by the community, civil society, government, regional organisations and global actors (including the trans-national organisation). Knowledge-driven actions arrest the destructive cycle of frustration that leads to violence and suffering, replacing it with a regeneration of a peaceful order, for the benefit of all humanity.

Metaphysical Innovation. The comprehensive inner transformation of perspectives, actions, and advocacy to those entities knowledge is distributed to, replacing persisting negative values such as racism and impunity with a humanising experience recognising the uniqueness of humanity and the positive values of Ubuntu. Innovation capitalises on the metaphysical development of societal knowledge, developing from generation to generation based on new experiences, owned by individuals, collectively by clans and members of broader society, to be accessed and shared by experts to deal with specific problems such as conflict resolution.

To implement these principles, the following good practices of a Trans-dimensional KM Model (TDKM-M) are identified:

• Good practices from the traditional culture are adopted by a modern knowledge system to solve modern problems applicable to a contemporary situation.

- Political interventions for national reconciliation, legal action against perpetrators, traditional and religious practices to encourage people, including perpetrators, to disclose the truth without fear of prosecution are combined to renew society, allowing for a divided society to pursue collective knowledge and solutions outside politics if it wishes to do so.
- The involvement of the whole society, on not only organisational level but also accommodating the right of every citizen to contribute to knowledge creation, is accepted.
- Tacit evidence is transcribed and processed into tangible data, which can be analysed and judged by other people. Care is taken in capturing tacit knowledge that was disclosed under confidential circumstances on a public database. The practice does not provide for the long-term protection of sources and is unforgiving where absolution and closure are seen as a vital element of reconciliation.
- An inter-disciplinary and Representative Knowledge Pool of intellectual capital ('higher minds', leaders, managers, and experts) is established as a link between the normative knowledge foundation and the empirical knowledge claims of society.
- The process involves gathering of data from the realm of the 'lawn' or village, the processing of information in an information centre, to reach a synthesis of interpretation in a COP such as a courtroom or parliament where vital decisions are made that would activate intervention and innovation.
- It is necessity to eradicate the thinking of class-consciousness, racism and impunity through learning intervention, replacing it with universally accepted positive values such as Ubuntu as an opportunity to renew the worldview of society.
- Trust, respect and cohesion are built between African Society and its partners that are involved in or support reconciliation efforts as an imperative for collective KM.
- Permanent decentralized collective knowledge centres are established in conflictaffected communities.

The ideal centre is

- representative of broad society and intra-linked with other actors who chose to contribute to society;
- Under joint control and accommodates the intellectual capital of the community and other mandated actors on an equal footing;
- An intra-active cohesive joint working group involving all actors in equal relationships;

- part of an intra-connected collective, trans-disciplinary COP that focuses on KM for conflict resolution;
- A trans-disciplinary information-processing unit where research, joint interpretation
 of knowledge claims and publication take place according to a set of indicators, to
 provide early warning of conflict or to enhance understanding;
- A producer of synthetic products that presents innovative solutions for the formulation of new legislation, policies, strategies and plans to intervene in the cycle of deprivation, frustration, and aggression that cause conflict;
- empowering communities to find solutions for challenges on their own or collectively but equally with other actors; and
- guided by regulatory instruments to guide aspects such as confidentiality and responsibility. The model can be illustrated as follows:

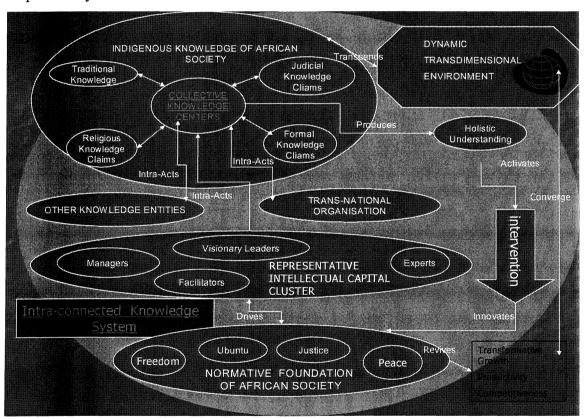


Figure 9.1: The Trans-dimensional Knowledge Management Model

9.4 EXPLANATION

9.4.1 THE PRINCIPLE OF NORMATIVE FOUNDATION

The TDKM-M is founded on the normative principles of justice and truth, as depicted by among others the beliefs of the ancient Egyptians, as represented by the symbolic 'goddess', Maat. Furthermore, the principles of Ubuntu as manifested in the traditional societies of Africa in the form of respect, humaneness, dignity and togetherness, form the central path of the model of KM for the renewal of African society.

Intellectual capital of Africa is built on the normative foundation of truth, justice and Ubuntu. In this model the 'higher minds' or visionary leaders of Africa consider these values in guiding their people towards intervention in conflict situations. Managers plan, organise and guide resources according to these principles. Facilitators in COP, such as for instance mediators in a conflict, are guided by these principles to ensure synergy of interpretation and action. Expert knowledge workers implement best practices according to these principles to reach a new synthesis of indigenous knowledge.

A good practice is the establishment of a Representative Knowledge Pool of leaders, managers, facilitators, and experts who can be called upon in case of a crisis. This concentration of intellectual capital consists of value-driven people with positive perceptions of other cultures, trans-disciplinary insight, knowledge awareness, a culture of learning and the ability to participate in joint working groups as part of a community of conflict resolution practitioners.

9.4.2 THE PRINCIPLE OF COLLECTIVENESS

In this model, the indigenous knowledge of Africa is a synthesis of traditional knowledge, religious knowledge, judicial knowledge, and formal knowledge claims. These knowledge perspectives are evaluated, analysed, synthesised, interpreted and protected in formal or informal knowledge centres of the community, regarded as of equal importance.

Traditional knowledge claims are accessed through the collective memory and oral tradition of members of the village community. Traditional practices, in this case conflict

resolution practices, are adopted by the community to solve contemporary challenges such as the need to prevent or intervene in a conflict.

Religious or spiritual knowledge claims are considered where pluralism or syncretism was achieved by the religious community of society, and collective agreement was reached on the role of spiritualism in the conflict. If agreement is not reached, the various religious knowledge claims are not rejected, but the influence of those beliefs on the conflict is collectively evaluated by society to determine whether the claims serve as a cause or potential solution to the conflict.

Judicial knowledge claims, in the form of evidence and verdicts of judicial procedures, whether traditional or modern, are scrutinised to determine the truth about what happened. The value of the knowledge claims depends on whether the environment in which judicial procedures took place was free of manipulation or intimidation.

Formal knowledge claims include formal analyses of governmental institutions, NGOs, CBOs, academic institutions and 'think tanks' that performed independent field research and published their findings. These include the formal knowledge claims of the transnational organisation that is in business with African society.

The collective knowledge centre (CKC) is a good practice where all the knowledge claims of society are collectively processed in an atmosphere of trust, respect, and cohesiveness. CKCs are decentralised to function inside affected communities on the periphery of society. The CKC is staffed by people who represent the knowledge claims of society and participating actors from outside the community. The model envisages a joint working group as part of an intra-connected trans-disciplinary COP that focuses on KM to prevent, intervene in and resolve a conflict. This unit performs independent field research to investigate knowledge claims, processes its findings to form part of the existing synthesis of knowledge, jointly interprets it to find new perspectives, produces synthetic knowledge product and publish it to where timely intervention can be activated. The CKC also empowers the community with knowledge by distributing its products to the community, suggesting innovative solutions. The functioning of the CKCs may be guided by a legal framework of regulatory instruments such as MoUs, determining aspects such as confidentiality and specific responsibilities, but such frameworks and instruments are

appropriate only where a complete level of trust has not yet been established. A CKC can be illustrated as follows.

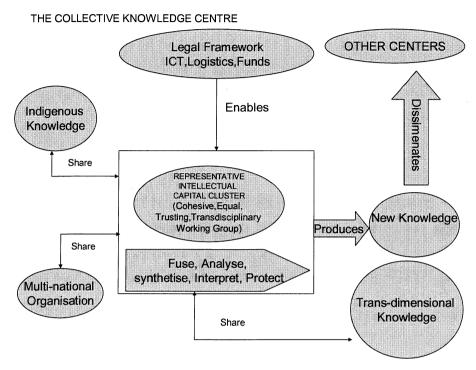


Figure 9.1: The Collective Knowledge Centre

9.4.3 THE ACTIVATION OF INTERVENTION

This model shows that knowledge activates intervention. Trans-dimensional and holistic perspective into the causes, progress, and consequences of conflict is brought about by the IKS and enhanced in the CKC on community level. The results are collective interventionist activities by the community, broader society and other partners, including trans-national organisations. Conduct is knowledge driven and aimed at a point where knowledge shows it can affect and stop the cycle of violence. The point of impact may be aspects such as frustrations caused by poverty and deprivation, or a culture of impunity, or political marginalisation of communities, continuous ongoing violence, or the need for post-conflict reconstruction.

The impact of the intervention is driven by global, continental, regional, national and local legal frameworks, policies, strategies and action plans, including contingency plans. Holistic, trans-dimensional knowledge informs these drivers in the form of early warning

that prompts immediate decisions and actions to prevent conflict or intervene where it takes place. Furthermore, a holistic perspective that transcends physical and mental boundaries enables these drivers to ensure effective impact to eradicate the causes, intervene decisively in events and manage the consequences thereof.

9.4.4 THE METAPHYSICAL INNOVATION

This model prescribes that new trans-dimensional, holistic understanding be applied to shape the overall worldviews of people to discern right from wrong in reality. A view of the universe from a perspective of class-consciousness, racism, impunity, and violence must be replaced with a view from the perspective of Ubuntu, justice and continuous search for the truth. To ensure revival, African society must return to the norms of togetherness, respect, humaneness, and ensuring the right to dignity for all.

Trans-dimensional knowledge and a holistic view of the world enable metaphysical innovation through learning of new perspectives and intuitions that could develop into new knowledge and that could be applied to meet the expectations of the African people in a better world characterised by freedom, peace and justice. The quest for freedom, peace, and justice for all is attainable if driven by an understanding of phenomena that prevent self-empowerment and these expectations from becoming true. Furthermore, holistic knowledge informs what is required from African society to reach transformative growth, productivity and competitiveness in a structured world economy, towards convergence with the holistic global order, or in an unstructured and informal way as part of the normative foundation of a revived African society.

9.4.5 THE HOLISTIC ORDER

The model illustrates that the normative foundation does not exist in isolation, nor can a synthesis of indigenous knowledge takes place in seclusion. Innovative intervention can also take place independently. Successful KM requires the meeting of intellectual and social capital in a trans-dimensional and holistic order in a quest to find the truth about phenomena.

The principle of 'holistic order' implies that all individuals, communities, societies and other entities are interconnected or intra-connected in one way or another way. Entities are inter-connected in the sense that there may be other entities in between as part of a chain of entities, and that not all entities are directly connected, for instance a community on the periphery of society is not in contact with the AU.

However, intra-connectivity implies that entities are intra-connected and that they function through each other and together as one collective unit, for instance if the ICC could succeed in settling and perform its functions in the community where incidents took place. From a KM point of view, it means that all KM activities take place collectively through intra-connected CKCs, as discussed, and that the product from each centre is communicated to other centres where it becomes part of and adds value to the collective knowledge of the other centre. A new fusion of knowledge then becomes available in the entity that can be distributed to other centres in the network or chain. In this way, knowledge is continuously renewed as it is processed through CKCs on community level. For instance, the indigenous knowledge of Gulu can be successfully shared with officials in Kampala, the UN, or the AU, where it is renewed and not consumed.

It is noted that this model does not allow for hierarchical control or manipulation of the flow of knowledge through the centres and a central entity is nowhere to be found. However, several knowledge centres can cluster around a main centre for practical reasons, for instance if the interventionist action depends on decision-making and the resources of a metropolis or where CKCs are part of a formal arrangement. All knowledge products are therefore equal, but the value of it depends on how effectively the product is processed and shared with other entities. In this regard, distance between entities plays a role and determines the type of communication method to be used for transferring knowledge from one entity to the other. For instance, several institutions in Rwanda may form a cluster around the Gacaca department without being controlled or manipulated by that department.

In practice, it means that within the CKC wise and knowledgeable people (intellectual capital) are required to receive knowledge from other entities, render it tangible where it is not yet in tangible format, evaluate it from a local perspective and analyse it against a framework of indicators used by the CKC, and produce a new synthetic knowledge product. Judgement is then required on how this knowledge should be used, including the

option to prompt immediate operational decisions and actions or to transfer it to where it can be used for advocacy to effect policy changes or strategic redirection. An imperative is to share it with other entities where similar judgement takes place.

Eventually the position of the entity in the holistic order determines the social capital of that entity. In other words in which network and where in a network the community is situated, with regard to distance, centrality and effectiveness of communication, as well as the quality of knowledge outputs and action interventions, determines the value of social capital of that community. For instance, the community of Gulu enjoys significant social capital because of its position in the Catholic Church, the attention it receives from international institutions such as the UN, research institutions and their relations with other actors in the Great Lakes region.

In this model, protective mechanisms are discouraged, but it allows for flexibility of implementation, keeping in mind that entities still exist in a real world of negative values and hostility. Therefore, mechanisms should be in place to protect knowledge from manipulation, exploitation and abuse. The best practice is to have clear policies, which allow for sharing of knowledge while spelling out what knowledge must be protected and under what circumstances this must happen. Care must be taken not to withhold knowledge from the rest of the network, as it will destroy trust in and the credibility of the withholding entity. For instance, continuous denial by Rwanda that the exert influence or has knowledge of rebellions in the DRC, or paranoia about national security, limits the use of Rwanda as a credible knowledge entity, despite a wealth of intellectual and social capital.

9.5 PRESCRIPTIVE PROPOSITIONS

The TDKM-M is a cyclic process and unique categories of interactive patterns that not only illustrate principles and practices, but also prescribe theory. The following propositions are applicable.

<u>Proposition 1</u>. The normative principles of justice and truth, and the traditional principles of Ubuntu (respect, humaneness, dignity and togetherness) must form the foundation of the innovation of African society.

<u>Proposition 2</u>. A trans-disciplinary team in the form of visionary leaders, capable managers and facilitators, as well as expert knowledge workers with trans-disciplinary insight and cultural awareness must drive KM activities to enable a synergy of knowledge and a culture of learning in a CMG.

<u>Proposition 3</u>. The knowledge embedded in the collective memory, oral tradition and symbolism of the village community, especially knowledge concerning coping with conflict, must be harnessed as a valid knowledge claim to prevent or intervene in a conflict.

<u>Proposition 4.</u> Religious or spiritual knowledge claims must be considered and collectively evaluated by society to determine whether the claims serve as a cause or potential solution to the conflict.

<u>Proposition 5</u>. Judicial knowledge claims must be scrutinised to determine the truth about what happened, provided the environment in which judicial procedures took place is free of manipulation or intimidation.

<u>Proposition 6</u>. The formal analyses of the trans-national organisation, governmental institutions, NGOs, CBOs, academic institutions and 'think tanks' must be evaluated as knowledge claims to enrich indigenous knowledge.

<u>Proposition 7</u>. The indigenous knowledge of Africa is a synthesis of equally important traditional knowledge claims, religious knowledge claims, judicial knowledge claims, and formal knowledge claims to be evaluated, analysed, synthesised, interpreted, and protected in formal or informal knowledge centres of the community.

<u>Proposition</u> 8. Decentralised CKCs must be established jointly by trans-national organisations and communities inside affected communities, especially those on the periphery of society, as best practice to process all the knowledge claims of society in an atmosphere of trust, respect, and cohesiveness.

<u>Proposition 9</u>. Knowledge, as produced in CKCs must activate intervention by the community, broader society and other partners, including trans-national organisations to arrest the causes, progress, and consequences of conflict.

<u>Proposition 10</u>. New trans-dimensional, holistic knowledge must transform the negative worldviews of people from a new perspective of class-consciousness, racism, impunity and violence to the perspective of Ubuntu, justice and continuous search for the truth.

<u>Proposition 11</u>. Innovation of the knowledge of society requires an understanding of phenomena like conflict that prevents the fundamental changes of individual and collective perspectives of society.

<u>Proposition 12</u>. Successful KM requires the meeting of intellectual and social capital in an intrinsic network of knowledge producing entities in a quest to find the truth about phenomena.

9.6 APPLICABILITY OF THE MODEL

The propositions of the TDKM-M can be transferred to other situations in Africa, to achieve the second goal of the study that of finding practical solutions that could contribute to the revival of Africa.

9.6.1 GENERALISATION TO OTHER CONFLICTS IN AFRICA

One challenging situation in Africa is post-conflict reconstruction in several countries in Africa. In this study, the case of Rwanda was extensively researched with the emphasis on KM during the post-conflict reconstruction phase. The challenges confronting Northern Uganda once peace has been attained were also identified. A logical consequence of what was learned would be making that learning applicable to the rest of the Great Lakes region. Therefore, the first transfer of findings would be to the post-conflict reconstruction of the society of the DRC and Burundi, both countries in a fledgling stage of reconstruction. Transferability will be illustrated mainly by citing the DRC, with Burundi being mentioned where intuition shows it to be appropriate.

It is especially in the case of the DRC where the normative principles of justice and truth are sorely needed as a first phase of national reconciliation and consolidation after elections in the DRC. A society driven by greed and survival instinct runs the risk of falling back into a cycle of violence, which has become a characteristic of Congolese society. Combined with a persistent culture of impunity and violent conflict, the scene is set for further disaster, unless these negative values can be replaced with justice and truth. Justice must be done in the sense that perpetrators of violence, especially leaders behind the violence, have to be brought to justice in some way or another. The millions of victims must see that justice is done. The case of Thomas Lubanga, who is currently pursued by the ICC is a step in the right direction. However, the DRC society itself will have to act. Appropriate action will require a value-driven criminal justice system, reform of the security sector and constitutional implementation. All this will have to be activated by collective knowledge based on shared norms such as justice and peace.

However, justice for the sake of revenge will not serve any purpose because of the widespread abuse of human rights that took place over many years. As in Rwanda, and maybe to a larger extent, members of the new dispensation may find themselves on the wrong side of justice. Such a situation will serve no purpose and will not remove the causes of the conflict. The only viable alternative is to restore justice and ensure that in future justice is applied to the whole of society, especially those on the periphery such as Ituri and the Kivus. To apply justice, the DRC must ensure that a justice system that reflects the culture of Congolese society is established, considering the indigenous way of applying justice as an integral part of the system. Any modern system based on Western models may be seen by the rural population, especially in the underdeveloped eastern part of the country, as an imposition by the West or the ruling elite in Kinshasa.

How are the norms of truth and justice established in a country such as the DRC? Despite intense observation, many analyses and diverse publications on the causes, events and consequences of conflict in the DRC, no level of synergy has been reached on what constitutes the 'truth'. Experience teaches that the victors write the history. In this case, the 'truth' about the conflict will probably be decisively dictated by the new DRC government and its sponsors, reinforcing the perceptions of the victor. Alternative perceptions will persist for a while, but will probably disappear in the 'mist of time' if not consciously considered as knowledge claims. Truth as practical value therefore requires a

nation or society to rise above mere political considerations in a quest to know what happened. Only then can the causes of dysfunctions in society be understood. Any mechanism that is implemented by the DRC government to establish the 'truth' or to seek 'justice' in a quest for revenge or short-term consolidation of political power will only serve to obscure reality and will probably never establish a normative foundation from which society in the DRC can revive itself.

The emphasis should rather be on relearning the principles of Ubuntu, a cultural trait that comes natural to Africans, but appears to be lost to Congolese society. Disrespect for each other and foreigners, inhumane killings of political and economic rivals, dignity that is only afforded the wealthy and divisionary thinking associated with Western culture are cultural traits of especially the urbanised Congolese. Revival of society would require a new doctrine of Ubuntu to replace these cultural traits with a new culture of respect, dignifying the role of every citizen in society and humaneness in dealing with rivals. A doctrine of Ubuntu would therefore build a new perspective of the world and new enriched knowledge claims, essential for the reconstruction of society.

To lay this foundation for a revival of society, visionary leadership would play a vital role. Whether President Kabila would be able to play this decisive role as leader, time will tell. However, leadership alone would not be sufficient. Reconstruction programmes and reengineering of society will have to be facilitated by capable and knowledgeable middle-level managers. There is little doubt that much intellectual capital is available in Congolese society and the Diaspora that would only require mustering in a Transdisciplinary Knowledge Pool for deployment where they can make an impact. This pool can be reinforced as people are trained as experts. The pool can be filled by experts from outside the DRC where shortages of particular expertise are experienced. Care must be taken to ensure that the expertise is harmonised with the values of Ubuntu, with an awareness of the need for transformation of society in the DRC. Expertise without respect for local views and cultural awareness, or worse, accompanied by foreign political agendas, may prove to extend the disrupted nature of society.

A good way of enhancing this Trans-disciplinary Knowledge Pool would be to revive traditional practices that have become obscured through years of violent conflict. Management and facilitation on village level should be according to a hybrid of traditional

and modern practices, resting on the wealth of indigenous knowledge of society. In the village community a return to the collective memory of survivors, listening to the narratives of elders who survived and understanding the unique symbolism of Congolese society could reopen a new world of understanding of what should be done to retain peace. Combined with positive religious practices in the DRC that remain an integral part of and spell out the values of peace in society, a wealth of knowledge and knowledgeable people emerge. If managed according to the principles of trans-dimensional KM, they could contribute to a healthy pool of intellectual capital that would drive post-conflict reconstruction.

It is also in the DRC where the practice of decentralised CKCs could serve the vital purpose of bringing communities together after a long war. In this centre the knowledgeable people of Kisangani, Goma, Bukavu, Kalemie and others could gather and participate collectively and intra-actively to harmonise the perspectives to attain collective knowledge. Therefore, the decentralised nature of the CMC is of the utmost importance, because it would serve the purpose of empowering local communities to merge local knowledge with knowledge contributed by official inputs and global knowledge brought added through participation and assistance by NGOs and researchers. If successful middle ground is found in this centre, it could become a powerful centre of learning and advocacy that informs policy and strategies on all levels in the DRC. Moreover, it could serve as an early warning facility to warn the world of the outbreak of renewed conflict in the immediate area in close cooperation with security structures set up for that specific purpose.

Centres of this nature should be given the necessary logistical capacity and financial support by authorities and other sponsors, taking special care they remain part of a good governance implementation plan and part of the democratisation process, but thinking outside the restrictions of the formal structure to ensure holistic insight. It must therefore be representative of society and from society, with all knowledge claims consciously accommodated, avoiding dominance and manipulation by anybody with an agenda outside that of empowering the people of the DRC to secure and develop their own community.

Centres should have a local research capacity in the form of expert field workers working in the village communities with the focus on staying in touch with the expectations and solutions proposed by the village elders and their people. Data gathered in this way could be fed into the CKC to be fused with data obtained from other indigenous or external sources to obtain a holistic picture. On the technical level, field workers must be people with knowledge awareness and inter-cultural communication skills to understand the idiom of the culture and to be accepted by the community as their own. This implies that unobtrusive measures are not tolerated, as is the practice in a society under siege, such as the DRC. Expert knowledge workers are recognised by the community as such and used as a medium to articulate unique knowledge and expectation that can be used for the common good.

The conflict in the DRC and the subsequent involvement of UN and other conflict resolution institutions, together with the historical interest in the mineral resources of the DRC, brought about a network of social capital that now can be put to good use for post-conflict reconstruction. The DRC forms part of several formal arrangements such as the SADC, the Great Lakes region and the AU. Culturally the DRC is linked to Angola, other peoples inhabiting the Congo Basin, other nations eastward as far as the Great Rift Valley and the Bantu in general. This cultural and social capital played a decisive role in bringing about democratic change and relative peace in the DRC. Now this privileged position in the holistic order of things can yield the knowledge and support to build the country and make sure that the expectations of its entire people are met. The DRC government and civil society in general need to 'plug into' existing networks, developing a horizontal relationship with other entities and moving away from the traditional sponsor-receiver or 'patron-servant' relationship with major powers that persisted even after independence.

The expectation is that the root causes of the conflict, structural, socio-economic, political, and psychological, will be removed by active state intervention. However, to do that, knowledge as an outcome of the wealth of intellectual and social capital available to those empowered to intervene, together with available financial and other resources, should be applied to ensure good governance. After consolidation of political power, the government should muster the indigenous knowledge of society to activate productivity, wealth creation by all citizens and protection of the natural resources of the DRC against exploitation, in a spirit of a new togetherness and mutual respect.

Indigenous knowledge (not Western paradigms) should drive the policies, structuring and strategies of a new security sector, including an early warning capacity, as part of regional arrangements, to warn of impending threats to its territory (military or economic) or the reemergence of intra-societal conflict. To affect this, the involvement of village communities, especially those on the periphery of DRC society overlapping into other nation-states who are the source of persistent tensions, should be bounded into a collective arrangement of local governance, including management of knowledge for reconstruction.

A new paradigm of KM in the DRC should take place in the realm of indigenous knowledge. The realm should include the traditional realm to find intra-connectedness in the collective realm with trans-national organisations such as the UN, SADC and others. Such intra-connectedness should expand into the realm of global social capital to reach the vision of the renewal of the Congo nation and Africa in general.

Concerning Burundi, a similar application of the principles of the TDKM-M can be found; only, in Burundi, application of the model appears to be less complicated, as the society is smaller. However, the causes of the conflict are similar to that of Rwanda, in that conflict is based on an intense psychological, intuitive and sub-conscious belief that some people are more significant that others. No peacekeeping intervention or diplomatic mediation could remove this fundamental value issue, and it will remain a threat to peace as long as it persists, together with the severe difference in socio-economic conditions between Bujumbura and the rest of the country. Only a decisive effort by the people of Burundi to ensure justice for all in a spirit of Ubuntu and recognising that there are different versions of the truth of what happened in the past, and that those versions will remain different, will ensure lasting peace in this small but equally significant country. However, as in other places, transformation of society has to go beyond seeking justice, truth and the tradition of Ubuntu, towards the use of indigenous knowledge for production and economic growth. In this way Burundi can be a supportive entity in the context of the Great Lakes region and Africa in general, significantly contributing to convergence of African society with the rest of the new global economy.

The principles and practices of the model can also be made applicable to other societies in conflict that are not as fortunate as the DRC and Burundi that are in the process of finding lasting peace. The conflicts in Darfur and Somalia remain unresolved. The normative

foundation of these societies is different from elsewhere, in the sense that the Islamic world introduces a concept of justice and truth, founded on different interpretations of the Holy Koran.

The unique cultural context yields another brand of indigenous knowledge in Africa, a sort of knowledge that is overwhelmingly dominated by exclusivist religion that is embedded in the traditions of Islamic societies in Africa. However, close proximity to and intermingling with the Bantu of Africa resulted in a hybrid culture that is an integral part of indigenous knowledge of Africa that can serve as a point of departure for finding internal solutions without the unwelcome interference of 'infidels' in what is regarded as domestic conflicts (e.g. Somalia).

The knowledge of the intricacies of conflict in Islamic society is therefore regarded as unique understanding that can only be shared with great difficulty from a distance. Intervention in sustained conflict in Islam societies such as Darfur and Somalia must therefore be driven by the indigenous knowledge of those societies that understand what is required to be successful. In their efforts they enjoy the social capital of the rest of the Islamic world in a networks guided by beliefs. Any other intervention would not enjoy the quintessential requirement of being knowledge driven.

9.6.2 TRANSFERABILITY TO MULTINATIONAL BUSINESS

The TDKM-M can be made applicable to the business world, and specifically the multinational business involved in Africa. The model suggests a creative dimension and departure from the historic relationship of exploitation of African society by multinational corporations MNCs). TDKM-M implies a spiritual dimension to human behaviour away from exploitation and retribution to reach a sense of goodness through Ubuntu, peace, justice and freedom.

Field research explored and investigated the role of the trans-national organisation in the epistemology of Africa in the context of conflict resolution. Learning from the transnational organisation such as the ICC and ICTR can be transferred to the MNC context, as both entities require the same understanding of African society. The same environment that displays the expectations of African society displays the expectations and needs of

African society for MNC behaviour. It is therefore required of the business to move beyond the scope of own observation and scientific enquiry to both the indigenous episteme and the global network to develop a better than conventional insight into the expectations and sometimes misgivings of African society.

The corporation is therefore required to develop a new awareness that valuable knowledge is embedded in the traditional practices of Africa, especially in the collective memory and oral culture. To access this knowledge poses certain challenges for the business. Apart from the practicalities of language differences, a specific level of trust is required to access the traditional episteme effectively, with persistent suspicion of motives and the justified notion to protect. Collective memory includes perceptions of exploitation by MNCs, an obstacle to the building of trust. Understanding of Africa cannot be complete without understanding the perspectives embedded in traditional knowledge.

A good practice and point of departure would be gaining an understanding of the values embedded in Ubuntu, the African expectations concerning a just society and values that form the African view of what is true. If business ventures in Africa can understand that, the next step can be initiated, that of embedding these values into the business organisation in preparation of operations in an African environment, so often professed by contemporary literature. The second step would not be possible without the first step. The MNC therefore needs to revise organisational values to ensure that the business is an extension of the environment it is operating in, an extension that leads into the organisation and an intra-active relationship. Current practices of interaction between the MNC and African society have not developed sufficient common and shared values to break the pattern of exploitation and profit seeking to the detriment of African society.

To manage knowledge collectively the business and the society must have a shared vision of what needs to be achieved. The model showed that vision requires wisdom and people of 'higher minds', implying that people of holistic understanding, who have crossed the boundaries between physical realms and between the observable and spiritual dimensions, need to articulate their vision to the people they lead. People must make that vision tangible through policies, strategies, plans and action. For the business leader it means understanding the vision, for instance the African Renaissance vision, making that vision her/his own and living that vision in leading the business.

It also implies that where the vision of the business diverts from the African Renaissance vision or the vision of that specific community, the divergence of vision needs to be addressed by the business leader as a guest to avoid the disastrous effect of exploitative business ventures since slavery, colonialism and globalisation. For a business venture to be successful in Africa 'higher minds' need to find one another in a synthesis of vision to ensure a synergy of activities, such as the collective management of knowledge.

The model suggests a move away from the popular concepts of 'outreach' and 'corporate responsibility' to a conscious invitation of knowledgeable people into the business, even on decision-making level. Moreover, investing in a CKC in the African community, where people from both the business and the community can do research and learn from each other, may prove to the best investment that can be made in the knowledge economy. If this CKC can be expanded or join a network of similar centres, a idealistic but attainable knowledge creation network emerges that can serve both the expectations of African society and business interests.

Apart from visionary leaders, the model emphasises the vitality of managers who are capable of managing other people, also articulated as intellectual capital. The leadership style followed in the business, which operates in a trans-dimensional and multi-cultural environment marked by intra-action not necessarily rejects classic leadership paradigms, neither does it expand or reformulate other leadership theories. However, capable managers not only need the generic skills of managing resources in a planned, organised and controlled way. They must have proved ability to give dynamic direction and guidance to a diversity of people from different cultures to reach objectives. Furthermore, the new knowledge economy, of which Africa is part, requires a special awareness of knowledge as an important resource, in this instance also awareness of the indigenous knowledge of Africa.

For the modern leader in Africa the model prescribes a dynamic and activating style, departing from the normative value foundation of Ubuntu (now amply covered by studies of other scholars). The leader must be a trans-disciplinarian who continuously guides people beyond boundaries in their minds to transcend into the tacit and observable realms of knowledge around them. People must be guided to reach an integrative understanding and explanation of phenomena that involves the workplace and connectedness among

phenomena and people, which is impossible in the case of disciplinarity and the notion of 'managing in silos'.

The knowledge leader guides people to recognise a diversity of perspectives from people within the business, and to evaluate knowledge claims as of equal value in the context of the whole. The trans-dimensional knowledge manager intra-actively gathers indigenous knowledge in society, from other entities and from the holistic order, that the business and society is part of. Furthermore, the knowledge leader must guide central and joint processes to produce collective knowledge for short-term business decisions and to activate business.

The model shows that such an approach requires a culture of learning that can only be established by the active implementation of good practices such as joint working groups and creating opportunities for people to learn from one another. The African context provides many opportunities for learning in the form of diverse knowledgeable people whom intra-acts with business as employees, co-workers and managers.

The skill of facilitation and mediation becomes increasingly important in the world of KM and business. The facilitator is expected to connect people not only in working groups in the organisation but also in collective KM centres where people need to work together. The creation of a spirit of cross-cultural cohesion especially requires skilful facilitation to bring people from a diverse African community together with the diversity of people coming with multinational business from outside Africa. The facilitator is expected to cultivate new values required for KM in a CMG as a point of departure to leverage what are in the minds of a diverse people, including indigenous knowledge, towards a higher-level synergy of common or holistic understanding of challenges and opportunities.

The facilitator nowadays provide the essential service of connecting people and entities with each other to form knowledge partnerships across borders and cultures in a network of social capital. In other words, the facilitator creates social capital for the business through well-planned networking and liaison activities. The facilitator also acts as a mediator to resolve conflict or in the case of difficulties in finding common ground. It is here that conventional diplomatic skills are combined with expert knowledge of how to facilitate

independent views towards a convergence of perspective and the findings of joint solutions.

An assertion of the model is that both the organisation and the indigenous society exist in a dynamic environment characterised by instability. Peace, human security, and development are continuously threatened. However, vast opportunities exist for those entities that have the will and capacity to take advantage of it and manage certainty and uncertainty based on knowledge.

In describing the model, it was proposed that knowledge activates intervention. Activation of intervention is also true in the business world were knowledge should serve to ensure ethical and defendable decisions. In business, intervention takes place to ensure profit. Emerging markets cannot be identified, the needs of clients cannot be satisfied, and shareholder expectations cannot be met without knowledge. If the emerging markets involved and clients are from the local society, in this case Africa, an intimate knowledge is required of the vision, values, expectations, and worldviews that form the dynamics of society. Therefore, collective common sense is needed to ensure defendable and ethical business decisions that would idealistically ensure profits for the corporation, balanced with the benefits of society.

This is nothing new, but the model prescribes a more complete or whole knowledge product, a result of a synthesis on several levels. Holistic knowledge implies tangible knowledge products, from knowledge obtained from the village community to collective knowledge of the society in which the community functions, as well as to knowledge that is the result of intra-active networking on a global scale. This would include the value adding of intuitive 'higher minds' that have a 'feel' for the spiritual and psychological environment, presented in one whole. It is acknowledged that those 'higher minds' would be difficult to identify, but if it were accepted that multi-cultural understanding, knowledge awareness and trans-disciplinary insight are criteria for selection, sufficient people would emerge to fulfil the role.

Holistic knowledge prompts decisions and actions on not only how business should enter the African market, but also how the expectations of innovation, an empowered response by the community, and self-emancipation of Africa can be met. Through holistic knowledge, African society and the business can demonstrate through intra-activity and collective KM that knowledge as an ingredient that drives effective labour and production and socially responsible service delivery towards transformative growth of African society, the revival of Africa and convergence with the developed world. It is also asserted that both the society and the business organization intra-connect as part of a broader people network that expands boundaries, implementing joint action plans contributing to sustainable development and human security.

The strategic framework of any business should be informed by knowledge and not opportunism, greed and power. Trans-dimensional and holistic knowledge activates trans-dimensional action. In the business world, it means that the collective knowledge of the corporation and the African community becomes a driving force behind issues like the expansion of new markets, creative new products and the identification of strategic issues that may influence not only the ultimate end of profit, but also to meet the needs and expectations of African society.

For a business moving into African society to establish itself, the holistic knowledge product informs choice with regard to which business sectors can be engaged, what risks can be taken in those sectors and what niches there are within specific market segments. Furthermore, the type and content of products and services to be offered in the African market require a higher level of understanding of what the market expects. According to the model, indigenous knowledge and the technical knowledge inherent to the specific type of business should form a tangible whole on the basis which vital business decisions can be taken. The tradition 'strong points-weak points-opportunities-threat (SWOT) analysis is just not good enough anymore. Business analysts in the centre of business need to replace the dichotomised thinking of the 'swot analysis' with a new synergistic type of thinking, merging the collective inputs of various sources in society into an integrated image of the environment, that clearly shows where the business can enter the market arena and what resources are needed to enter it.

An analysis of the internal strong points and weak points, such as suggested by the traditional SWOT analysis, of the organisation needs to be abandoned in favour of an audit of social and intellectual capital that implies a capacity far beyond structural or resource limitations. The findings of the 'capital audit' should show the capacity of the business to generate innovative ideas on how to serve and produce results. The traditional market analysis should be followed up by a synthesis of knowledge of market forces that would

affect business. Vital decisions on whether not to locate, or where, must be made together with other knowledge-driven decisions such as capital, human and other, needed for the venture.

Decision to be made would include where the business should be positioned in the holistic order of things in the form of strategic partnerships (in this context meaning partners who share a common required end state or vision) with the business, membership of community associations and where and how to implement the good practice of intra-action with African society.

Further knowledge-driven decisions to be made are what human resources will be needed and how they should be developed. In the context of this model it means the recruitment and appointment of intellectual capital, and the maintenance of a 'representative knowledge pool' that is used by the organisation to manage knowledge either in a CKC or to be consulted by the organisation when needed. Training and development focus on creating a culture of learning, awareness of diversity as a source of superior knowledge, communication skills (including the use of ICT) and trans-disciplinary action and skills.

When Microsoft preached KM as a 'new' concept, it probably had the sale of computer hardware and software in mind. The model deliberately moved away from emphasis on ICT as professed by the knowledge-management sub-culture. The model, supported by empirical data showed that ICT is only useful if driven by intellectual capital in the form of various experts who can use and maintain ICT systems. The model therefore implies that any business that uses the enormous advantages of modern databases and electronic communications, especially e-mail and the Internet, has developed the human capacity to render ICT an asset and not a liability.

The principle of collectiveness in the model prescribes a move away from the traditional 'marketing mix' of product, advertisement, and target group to a focussed innovation of perceptions. Therefore, a marketing strategy is aimed at the change of perceptions and not merely the understanding of perceptions to sell goods of service. The model implies capitalising on a holistic view of the market to identify a successful change of perceptions.

The crux of the model is to show how the indigenous knowledge of Africa can be used to achieve positive outcomes for Africa. It was found that there is a new awareness among

Africans of the value of indigenous knowledge to find solutions in Africa. However, the same awareness is absent in the trans-national organisations that were subjected to field research. Involving the 'indigenous' mostly entail the employment of Western educated managers and experts with the assumption that Africa is then represented in the institution.

This TDKM-M goes much further than the popular solution. Trans-dimensional and holistic KM requires the pertinent and conscious acceptance of the indigenous knowledge of African society as the driving force of good business decisions and activities. The model implies that the corporation must have the internal capacity to observe, process and use indigenous knowledge for decision-making as the most prominent part of the knowledge-base of the business, moving beyond an own scope of observation from a viewpoint external to Africa and reliance on ICT. The emphasis must be on direct intellectual relations with African society, inside Africa.

9.7 SUMMARY

The TDKM-M opposes existing models for conflict resolution in Africa as presented by multi-national institutions. Adopting the model would require from the organisation to position itself, plan, structure and direct activities towards participation in a CMG, and specifically to function in an equal way with community based COP and joint working groups without asserting itself on African society. Furthermore, it requires the transnational organisation to ensure that internal organisation and procedures allow for credible intra-action with a holistic order of entities as an entity that can add value to decisions and intervention actions in a multi-dimensional conflict arena, through the application of holistic knowledge production and distribution. Moreover, the prevailing rationale of KM that tends to be IT centred is overturned in this model, which asserts a shift to a human and learning focus.

The model shows that knowledge can be managed to ensure positive outcomes for the continent by activating intervention into conflicts, replacing a culture of class-consciousness, racism and impunity with the norms of justice, truth and values associated with Ubuntu. Successful intervention may lead to the innovation of perspectives focusing on peace in a free society and transforming African society into a productive and competitive society in equilibrium with the rest of the global order.

Finally the model prescribes the combined application of the principles of 'normative foundation', 'holistic order', 'collectiveness', 'activation of intervention' and 'innovation' and related good practices as a way in which trans-national organisations and African society can manage knowledge to advance the African Renaissance and the betterment of humankind.

The proposition of the TDKM-M can therefore be applicable to a larger part of the research population in Africa, without claiming to offer ultimate solutions. However, the nuances of specific cultural and political contexts will always inform the practical application of propositions reflected in the model.

The model is also applicable to the business world and prescribes that the business must have an insight into the indigenous knowledge claims of society, a holistic view including all observable realms and a trans-dimensional perspective of being to have a competitive advantage in the business world. Moreover, the multinational business must not only meet the expectations of share-holders to survive and flourish, but must also intra-act with peaceful African society in a spirit of fellowship in the quest to revive and innovate African society through the renaissance of the values of truth, justice, humaneness, togetherness and respect. The model asserts that such a renaissance would lead to transformative growth, productivity, and ultimate convergence with the rest of the global economy.

CHAPTER 10: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

10.1 SUMMARY

In Chapter 1, it was stated that the purpose of the research is to develop theory and expand the knowledge base in the field of humanities and African studies specifically. The second purpose is to propose practical solutions for the production of knowledge that would empower decision-makers to intervene successfully in the cycle of cause and effect of instability that prevents an African Renaissance. The specific aim of the study is to create a theoretical model for the management of knowledge, including indigeneous knowledge, to achieve desired outcomes for Africa (as discussed in Chapter 5) while promoting the African Renaissance. The crux of the study is to find a KM solution on how to manage knowledge embedded in the traditional communities, indigenous knowledge systems, as well as the intellectual and social capital of Africa in decision-making and actions, to reach holistic understanding and to terminate the cycle of instability in Africa. Research problems and subproblems were formulated and hypotheses offered as possible answers to the research problem.

The Great Lakes region of Africa was chosen as the general universum. Non-probabilistic sampling to identify specific units of analysis on theoretical grounds and judgement sampling were used. Case studies with specific trans-disciplinary, cross-cultural, trans-societal KM practices, which would answer the research problem and evaluate the hypothesis, were selected. Research was done by following a multi-disciplinary, inter-disciplinary and trans-disciplinary systems approach, using a qualitative research methodology on trans-national level.

To attain a trans-disciplinary and holistic model, epistemology and political science was reconciled through a philosophical and theoretical conceptual framework based on a literature study and a field study to render concepts operable in the epistemological field of specific cases in the Great Lakes region. After a comprehensive literature study that culminated in a conceptual framework to guide field research, a diverse spectrum of sources of knowledge, including exploratory observation, semi-structured interviews and participation in COPs the worldviews of diverse cultures towards holistic accumulated knowledge was accessed.

Abductive logic was used for the interpretation of the data gathered to explain how discourse amongst people can contribute to the understanding of phenomena.

Chapters 2 to 4, focused on the first sub-problem 'What is knowledge, knowledge in Africa and KM?' and involved a comprehensive study of relevant literature.

The review of literature in Chapter 2 indicates that knowledge is the result of discourse among people using language and other symbols, crossing mental, cultural and physical boundaries in a quest to understand phenomena. Two dimensions of knowledge were identified, namely the observable dimension and the tacit dimension, dimensions that transacts with each other to attain a higher level of what can be called trans-dimensional knowledge. The observable dimension consists of three overlapping domains, consisting of a normative knowledge foundation (which can be informed by the tacit dimension), empirical knowledge claims and analytical knowledge claims.

In Chapter 3 the concepts of KM were presented and it was found that KM is as an art and a science to convert, develop and leverage what people know into a substantial resource that is used to make decisions and actions. KM is therefore a suitable way of managing indigenous knowledge for the purpose of using it for wise decisions and appropriate actions. It was found that every structure, including the African community or external organisations involved in it, is a knowledge entity and part of an interconnected network or chain of communities or organisations as part of a global network. Within structures, the merging of knowledge claims are processed into new value-added holistic knowledge products that aim to provide trans-dimensional and multi-realm understanding to address dysfunctions in the organisation or society through defendable operational actions; and instruments such as medium term strategies and realistic long-term visions. Interaction and intra-action take place among and in knowledge centres and within communities and organisations to share knowledge in a network based on trust or inter-dependence. Intellectual capital from different cultures and disciplines is required to work together in a spirit of collectiveness in a collective middle ground to create a renewable holistic product which would reflect holistic understanding.

In Chapter 4, a literature study on African knowledge and knowledge in Africa was presented and it was found that ancient Egypt played a pivotal role in the development of an African

knowledge foundation. The traditional African views the tacit spiritual world, observable world and the human soul as an integrated 'whole', sometimes only articulated in oral tradition and unique cultural idiom. The values of Ubuntu, power relationships, symbolism and the quest for self-emancipation form part of a sophisticated and scientifically founded knowledge base. It was found that the indigenous African worldview displays a holistic cosmology of oneness of mind, body, soul, the environment, and a fusion of traditional perspectives, syncretism, socialism, liberation ideology, and the quest for survival or wealth creation. A fusion of these elements revealed an indigenous knowledge that may be valuable for aspects such as conflict resolution if it is managed to enrich decisions and actions that would ensure lasting freedom and justice for all in a secure and orderly environment for the revival of Africa.

The literature study as presented in Chapters 2, 3 and 4 enabled the scholar to identify sufficient variables to formulate a conceptual framework with indicators that could serve as guide for field research. By evaluating different schools of thought on what knowledge, African knowledge and the management of knowledge in Africa is, a comprehensive, thorough, but relevant framework is presented.

The findings of Chapters 2, 3 and 4 expanded considerably on hypothesis 1 that stated that, 'if a synthesis of normative, empirical, and analytical perspectives, including indigenous knowledge is formed, holistic understanding is created'. It was found that concepts used in this study are more extensive and complex (see Appendix B for Conceptual Framework). The literature study also revealed the need for further field research in order to determine the manifestation of KM practices in Africa as suggested by philosophical and theoretical concepts.

Chapters 5, 6, 7 and 8 focused on the second sub-problem, 'how is knowledge managed to intervene in conflict that prevents an African Renaissance'? Empirical studies involved a pilot study (chapter 6) a report of a field study in Uganda (chapter 7) and a report of a field study done in Kigali and Arusha (chapter 8).

In Chapter 5, it was found that knowledge is managed by organisations in Africa, including the African peace and security architecture and NEPAD, to promote the desired outcomes of peace, justice, human rights, self-empowerment and innovation towards transformative growth, competitiveness and equilibrium in a global community. These findings alerted the researcher to a few important KM themes that need to be focused on during field research.

- Theme 1: The Use of African Knowledge Systems to Prevent Conflict. The indigenous knowledge of Africa presents practices that could be used for conflict prevention, including the values of Ubuntu.
- Theme 2: The Finding of Collective Middle Ground (CMG) through KM. The theme addresses the merging of global knowledge with indigenous knowledge to complement each other in a horizontal power relationship of equal sharing and control to find solutions to and prevent conflicts in Africa.
- Theme 3: A Universal Network of Collective KM. The desired KM situation in Africa is a sphere of interactive networks, chains and formal centres of knowledge linking intellectual and social capital with the purpose to blend knowledge, to learn from the new blend of indigenous knowledge.
- Theme 4: Constraints to Collective KM. Constraints of collective KM that need to be removed such as the continued reluctance to share, the notion to protect because of distrust, and the persisting vertical power-relationship between major powers and Africa.
- Theme 5: Policy Frameworks, Strategy, Plans and KM. Policy frameworks, strategies, and action plans must be in place to enable KM in both society and business.
- Theme 6: Knowledge Production. The ideal knowledge product contains a synthesis of indigenous African knowledge and tangible knowledge inputs from as many other participants in the network that reflect all possible worldviews.
- Theme 7: A Culture of Learning. Intellectual capital is developed through a culture of learning and reconstructing the approach to education, which develops wise leaders, capable managers, and facilitators as well as expert knowledge workers who understands the interrelatedness and interdependence of knowledge systems.

From Chapter 6 (a report on a pilot study to evaluate the conceptual framework) the researcher took personal control of the data to achieve the aim of the study, to present a theoretical model for the management of knowledge for conflict resolution. The pilot study consisted of exploratory observation performed in the Great Lakes region. The study

successfully served the purpose of evaluating the conceptual framework, finding it to be an all-encompassing framework suitable for the study of a broad spectrum of KM activities in Africa. Furthermore, the pilot study confirmed that the communities of Gulu, the Gacaca court system as managed in Kigali and the ICTR in Arusha were suitable units for analysis. Moreover, the pilot study ensured an orientation that made planning of main investigation possible and shown execution of the main study to be feasible in the specific universum to answer the remaining and sub-problems and solve the problem. Six different but interactive 'realms' of KM were identified as specific themes for the main study.

- The Traditional African Knowledge Realm. On this level, the traditional knowledge of Africa is accessed to gather data on how to prevent or resolve violent conflict.
- The Indigenous Knowledge Realm. In this realm the unique tacit or explicit normative knowledge and scientific/empirical knowledge claims of society are gathered and processed in a central point with new knowledge for decisions and actions as an output.
- The Collective KM Realm. This realm involves the finding of collective middle ground (CMG) between the indigenous knowledge claims of Africa and the knowledge claims of entities from outside Africa.
- The Knowledge Production Realm. In this realm, synthesised tacit or tangible, renewable knowledge with a holistic perspective emerges that provides vision of the future, including early warning of incidents that might occur in the short term.
- The Social Capital Realm. In this realm social capital in the form of intricate trans-national and intra-societal networks of individuals and knowledge centres intra-act in a supportive dynamic trans-realm where knowledge is shared and renewed in a horizontal relationship.
- The Renaissance Realm. It is in this realm that policies are determined, realistic strategies are formulated and implementation plans are formalised to energise all involved to intervene to ensure stability that would enable the revival of Africa.

It was confirmed during the pilot study that all the realms are enabled by intellectual capital in the form of visionary leaders, competitive managers and facilitators, expert

knowledge workers, knowledge awareness in society and effective communications among individuals and among organisations through traditional or modern methods.

During the pilot study, a trans-dimensional knowledge paradigm emerged that involves collective management of traditional knowledge by village elders from the African village, indigenous African knowledge by leaders from the broader African society, trans-national organisations, and the global knowledge network. The new paradigm challenges the existing paradigms of knowledge management, especially Western models that are currently used by trans-national organisations involved in conflict resolution in Africa.

Chapters 7 and 8 reported on the main field research in Gulu, Kampala, Kigali, and Arusha. During field research, the manifestation of KM activities in the various realms as identified during the pilot study was clearly identified.

The first realm involves collection of information based on confessions and investigation on village level. What is distinct here is the public nature of hearings as effective checks to determine the truth. The practices of traditional justice are embedded in the society of Acholi and in the case of Rwanda, combined with modern practices.

The second realm of indigenous knowledge involving the broader context of society was visible in both Acholiland and Rwanda. Conventional modern justice systems are already formally integrated with the traditional system, political system and religions as part of one process. It was especially in Acholiland that the spirit of Ubuntu was seen as contributing to the finding of peace.

The third realm of collective KM in a CMG reflected the importance of intra-action and interaction among centres. The role of the ICC and the government of Rwanda and relations between the traditional leaders of Acholi and the rest of Ugandan society are examples of how collectiveness need to develop in order for different knowledge systems to complement each other in the interest of peace. It was found that in practice, there is no clear distinction between the realm of collective KM in a CMG and knowledge production (the fourth realm) as they actually form one realm where collective knowledge synthesis takes place.

The fifth realm, that of social capital, manifested as a complicated network of 'stake-holders' who are involved in the quest for justice and reconciliation, such as the ICC and the ICTR, but who are also bringing new disruptive global conflict trends to the Great Lakes region because of conflicting political agendas. The importance of social capital in the form of a network of actors, who are sincere in attaining lasting peace in Africa, was observed.

A sixth realm that of meeting the expectations of the people of societies in conflict through the fusion of knowledge claims was identified. It was found that the expectation of lasting peace in both Uganda and Rwanda and the resulting transformative growth and reconciliations calls for effective intervention to innovate society towards the revival of Africa.

The field study revealed that the indigenous knowledge of Africa and the internal knowledge of the trans-national organisation should be managed in a collective middle ground using intellectual capital. If universal principles and good practices to produce synthetic renewable knowledge for decision-making and actions in a dynamic transdimensional environment are implemented, the expectations of both African society and trans-national organisations will be met. This finding confirmed hypothesis 2, which stated that 'if the best principles and practices of KM are applied to make decisions and to take actions to intervene and terminate conflict in Africa it will result in positive outcomes for Africa'.

In Chapter 9, the sub-problem 'What is an appropriate model for the management of knowledge in Africa to promote positive outcomes for Africa?' is addressed.

Based on the principles of normative foundation, holistic order, collectiveness, activation of intervention and metaphysical innovation, as well as certain good practices, the TDKM-M is illustrated and explained. The TDKM-M opposes existing models for conflict resolution in Africa as presented by multi-national institutions. The TDKM-M requires from the organisation to participate in a CMG in an equal way with community-based groups, ensuring credible intra-action to add value to decisions and intervention actions in a multi-dimensional conflict arena, through the application of holistic knowledge production and distribution, focussing on learning, not ICT.

The model shows that knowledge can be managed to activate intervention into conflicts, replacing a culture of class-consciousness, racism and impunity with the norms of justice, truth and values associated with Ubuntu, leading to the metaphysical innovation of perspectives that focus on peace in a free society, transformed into a society characterised by productivity and competitiveness. The model asserts that this ideal situation can be attained by the application of the principles and related good practices in the management of knowledge by trans-national organisations and African society, in an equal relationship to complement each other, to advance the African Renaissance and the betterment of humankind.

To implement these principles, good practices of the TDKM-M are identified, including introducing the concept of decentralised Collective Knowledge Centres where all the knowledge claims of society are collectively processed in an atmosphere of trust, respect and cohesiveness.

Twelve prescriptive propositions were offered that can be applicable to a larger part of the research population in Africa and the business world, without claiming to offer ultimate solutions. However, the nuances of specific cultural and political contexts, insight into indigenous knowledge claims, the ability to attain holistic and trans-dimensional perspectives, the expectations of shareholders and intra-action in a spirit of fellowship in the quest to revive and innovate African society, will always inform the practical application of propositions reflected in the model. The successful implementation of the model will depend on how African society and the trans-national community overcome the constraints on trans-dimensional KM to apply the principles and practices proposed by the TDKM-M.

By successfully presenting the TDKM-M, hypothesis 3 is confirmed, which stated that 'if the normative knowledge foundation of Africa is renewed by the application of intellectual capital, the management of indigenous knowledge collectively with the available social capital of Africa, holistic understanding is created that activates intervention that would promote the revival of Africa ('The African Renaissance').'

10.2 CONCLUSIONS

10.2.1 SYNTHESIS OF FINDINGS

A synthesis of findings reveals that that knowledge is the result of discourse among people using language and other symbols to transcend cultural and physical boundaries in a quest to understand phenomena. Knowledge management takes place in various realms including the indigenous knowledge realm (including traditional), a common ground realm and a social capital realm. In each realm an observable knowledge dimension, consisting of a normative foundation, empirical knowledge domain and analytical knowledge domain, was identified. Furthermore a tacit metaphysical knowledge dimension was identified which informs and overlaps with the observable knowledge dimension. The two dimensions transacts with each other to attain a higher level of trans-dimensional knowledge.

KM must leverage this trans-dimensional knowledge, including the indigenous African worldview, for the purpose of activating intervention to resolve conflict and to promote the desired outcomes of peace, justice, human rights, self-empowerment and innovation towards transformative growth, competitiveness and equilibrium in a global community and the ultimate revival of Africa.

Trans-dimensional knowledge management is enabled by intellectual capital, social capital, knowledge awareness in society and the effective collective management of traditional knowledge, indigenous African knowledge and knowledge from the global knowledge network in a collective middle ground, applying the principles and practices of the TDKM-M.

IKS are becoming increasingly part of a holistic system, providing a trans-disciplinary and trans-dimensional character to the management of knowledge. It would require modern KM practices to incorporate IKS to enhance holistic understanding and to make it useful for defendable decisions and appropriate actions that would activate intervention to innovate society on a metaphysical level to end violent conflict and other dysfunctions in society.

To reach this idealistic end-state intellectual and social capital need to be deployed and managed artfully and collectively to ensure that IKS and other knowledge systems complement each other in an intra-active and trans-disciplinary way, enabling access to the trans-dimensional synergy embedded in IKS, that has previously been neglected in KM practices.

The vast intellectual capital available to the African community, and those dedicated to the revival of Africa, from the knowledge holder in the village to the visionary leader and trans-national expert needs to be linked in a network of formal and informal social capital in order to add value to one another's knowledge. This would require from the KM expert and manager to change to a new paradigm that views knowledge as a trans-dimensional concept characterised trans-disciplinarity that requires transcending artificial barriers created by dichotomised thinking brought to Africa by mostly Western models.

The way trans-dimensional knowledge is practised in Uganda shows that the nucleus of good practices and principles of trans-dimensional knowledge, based on traditional values, already resulted in a new spirit of reconciliation. Other 'experiments' such as Gacaca and the ICC do not display the same awareness of traditional perspectives and IKS, despite the fact that many good KM practices can be observed in the modern environment that could also be made applicable to the management of indigenous knowledge. Relying on formal evidence alone denies the institution sufficient understanding of the causes of conflict and the finding of lasting solutions.

The TDKM-M provides the opportunity for all involved in conflict resolution, and probably business ventures, to adopt a new way of thinking about the value of traditional practices and indigenous solutions, to replace existing models that proved to be ineffective, especially concerning the attainment of lasting peace. It is essential that for peace to prevail a fundamental metaphysical change of the normative foundation of society and holistic order is required, informed by trans-dimensional and intra-connected, intra-active, complementary understanding that activates decisive intervention.

The TDKM-M provides a possible way to achieve this required end-state. It is foreseen that the practical implementation of the principles and practices offered by the model would result in the realisation of all role-players that it is important to consider non-elite indigenous perspectives to arrive at a holistic understanding and that it is vital to find collective solutions to strategic challenges. It is also foreseen that a new synergy of worldviews would eventually supplant outdated perceptions as the success of inclusive, intra-active practices are observed by role players who are in search for alternative and better solutions for complex situations like the Sudan and Somalia and even beyond Africa for conflicts in the Middle-East.

A convergence of the conceptual framework, field studies and presentation of an appropriate model achieves the initial aim of the study, which is to create a theoretical model for the management of knowledge, including indigeneous knowledge, to achieve desired outcomes for Africa while promoting the African Renaissance. The research problem that enquired 'how should the knowledge of Africa be managed to promote positive outcomes for the continent" is therefore solved through the description, illustration, explanation and prescription of the principles and practices of the TDKM-M.

10.2.2 IMPLICATIONS OF THE STUDY

The student is of the opinion that a study of this nature will contribute not only to the attainment of the goals of organisations involved in Africa and the achievement of policy goals as articulated by the AU, but also assist to empower and meet the expectations of remote communities in Africa. The scholar has no doubt that the study will be useful to many categories of end-users in Africa. The proposed model will be available to the African Union, trans-national organisations, multi-national corporations and other businesses, regional institutions, governments, NGOs and academic institutions dealing with Africa. Furthermore, the contents of the proposed model will be accessible to the conflict resolution and early warning community, for practical use. Especially conflict resolution facilitators and knowledge workers supporting conflict management ventures in Africa will greatly benefit from the study. The significance of the study is offered by way of conclusions and recommendations at the end of this chapter.

The findings of the study also proved to be useful for the development of trans-disciplinary theory and the expansion of knowledge in the field of the humanities, specifically African studies.

10.2.3 VALUE OF THE STUDY

It was found that the discipline of political science allowed for the contribution of new theory and knowledge in the field of humanities, but the approach to the research problem from a political perspective proved too narrow and specialised for the complexity of the problem. The separate treatment of disciplines did not lead to anything new and only reinforced existing paradigms about Africa, especially Afro-pessimism that became the hallmark of Western paradigms. Furthermore, binary logic was not sufficient to encompass the purpose and scope of the research.

Because of the complexity and broad scope of the problem, the study was also inter-disciplinary. Research from several disciplines and different specialities was combined and converged to enhance understanding of knowledge and knowledge in Africa. It requires familiarity with distinctive components, especially political science (including Africa studies) and epistemology. The study also had to be inter-disciplinary to access the knowledge embedded in African knowledge systems and mediated successfully between epistemology and political science. Ideas and methods also had to be borrowed from business science and sociology.

The study was also multi-disciplinary in the sense that during conferences and joint workgroups, interaction took place with scholars from different disciplines who were finding holistic solutions, creating an understanding of phenomena such as conflict in Africa.

Because of the complexity of the challenges of Africa, the holistic dimensions that were confronted, the different layers of reality, the investigation of collaboration among people and societies, and the goal of creating new knowledge the study had to be transdisciplinary. It consequently transcends and moves across boundaries of conventional academic disciplines in order to share, solve problems and create a new paradigm. Transdisciplinarity resulted in a new theory of how vision and personal experiences can lead to the self-exploration of being, a change in perceptions, the rebirth of society and a blended holistic understanding beyond where common knowledge is recognisable, by becoming part of another realm or dimension.

In practice, trans-disciplinarity requires good communication skills, including speaking and understanding English as a shared language, but also the mastering of computer communications to overcome the reality of distance. It also requires mental venturing into unmapped forests and physical intra-action in a realm relatively foreign to the researcher. The limitation of own disciplines and specialities were recognised in the case where the study require investigation into the values and cultures of people. The study confirmed that a certain amount of courage is needed to formulate interpretations, criticisms, and new relevant theories, through the trans-disciplinary approach, without denying or forgetting the value of insight gained through the initial discipline, political science.

The study sought to transcend the boundary between political science and other disciplines such as epistemology and business studies and to navigate the collective middle ground between disciplines, beyond dichotomized and divisionary thinking towards a new holistic understanding. The study found the space that lies beyond all discipline where the wholeness of knowledge is harmonised in a new theoretical understanding of our present world and our being.

The findings of the study are also of potential practical significance for the promotion of the African Renaissance philosophy, especially in finding practical solutions for the challenges of Africa through the management of knowledge for conflict resolution, or by transferring the propositions of the new theoretical model to the rest of Africa or to the multi-national business.

The potential practical implications of the proposition of the TDKM-M are that the knowledge entrenched in collective memory, oral tradition and symbolism of the village community must be harnessed by leaders on all levels and from all dimensions to find solutions. The need is to shift from a singular to a wider collective and trans-national approach.

The implication is that religious or spiritual knowledge claims and the outcomes of judicial procedure cannot be ignored and needs to be scrutinised to determine the truth. An important practical implication is that the formal analyses of the trans-national organisation, multi-national business, governmental institutions, NGOs, academic institutions and 'think tanks' enrich indigenous knowledge, but should not play a superior role in any holistic understanding. The model propose the practical evaluation, analysis

synthesis, interpretation, protection and equal treatment of all knowledge claims in formal or informal knowledge centres in society. These proposals have potential practical significance on how African society manages its knowledge.

10.3 RECOMMENDATIONS

As an outcome of the experience of this study, the following is recommended.

The political scientist will have to consider moving beyond disciplinarity towards transdisciplinarity. This implies limiting restrictive disciplinarity only to those young minds that are still in the process of being skilled or learning the basic concepts. However, although it is asserted that specialisation may lead to ignorance, it is also recognised that support of this assertion requires research in the educational discipline and a debate between shaping holistic understanding and the need for meta-skills and critical thinking, which requires some foundational knowledge.

The Afrocologist must relentlessly pursue the trans-disciplinary approach to reach a higher understanding of the challenges and achievements of Africa and present it in a format that is accessible to all Africans. A solution still has to be found to confront Eurocentric understanding that comes with the challenges of translation, which articulates African ideas in Western academic terms.

The strategist, who relies on understanding of reality to strategise, needs to move beyond multi-disciplinarity towards inter-disciplinarity and a holistic understanding of reality, keeping in mind that knowledge of reality as claimed by one is not necessarily based on the holistic and trans-dimensional understanding of others, and may mislead the strategic intent, selected courses of action and application of means. The strategic intent of intervention in conflict should be the renewal and reconstruction of the society in conflict. Courses of action should include action beyond symbolic peace missions towards fundamental change of society. Course of action would require the whole society to play a leading role, not only the 'champions' of the interventionist forces or ruling elites. Those role players who are sincere in intervention to innovate society would be willing to forfeit the immediate operational advantage of destroying communities, political goals that serves self-interest, and accept that a stable society founded on peace, freedom, justice and

togetherness would make the achievement of strategic objectives more lasting and substantial. Means applied should strike a balance between protection of the vulnerable by a credible force, value-driven trans-national involvement in the effected society on all levels and extensive socio-economic reconstruction of society involving the whole of society.

It is recommended that the KM practitioner implement the principles and practices identified in this study, which is essentially innovative and human focused. The traditional cyclic thinking in order to create 'intelligence' or other knowledge, depending on ICT, must be replaced by a thinking that positions the individual and organisation within a transdimensional environment, accommodation all views of the local and the global community, to create a higher level of understanding. It should now be accepted that ICT is nothing more that a useful tool to communicate and display information, not to manage knowledge, which is the prerogative of the intellectual capital of society and the organisation.

To scholars in the humanities, it is suggested that the assertions of the TDKM-M be researched in other cultures outside Africa to affect wider generalisation and transferability of the findings. Furthermore, it is suggested that psychology as a discipline be explored as part of future trans-disciplinary African studies on the concept of knowledge. Although allowance was made for the spiritual dimension in this study, it was experienced that the psychology of the soul shapes human cognition and cultural behaviour, and that the disciplines of psychology or theology, if transcended from the field of epistemology or other disciplines of the humanities, could explain better how truth claims are constructed.

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FIELD RESEARCH REPORTS (FRRs)

- FRR 1: Semi-structured interview with key informer from Caritas, Gulu
- FRR 2: Semi-structured interview with the Elders of the Acholi
- FRR 3: Semi-structured interview with key informer from ARLPI, Gulu
- FRR 4: Semi-structured interview with a general manager from Caritas, Gulu
- FRR 5: Semi-structured interview with the programme manager of Mega FM, Gulu
- FRR 6: Semi-structured interview with the Chairperson of the Amnesty Committee, Gulu
- FRR 7: Semi-structured interview with the coordinator of the NGO Forum, Gulu
- FRR8: Semi-structured interview with key informer from the Gacaca Court System, Kigali
- FRR9: Semi-structured interview with a legal officer from the Gacaca Court System, Kigali
- FRR10: Semi-structured interview with the President of the Bar, ICTR, Arusha
- FRR11: Semi-structured interview with the Programme Officer of the Justice and Peace Commission, Kigali
- FRR12: Video and verbal briefing by the protocol staff of the ICTR, Arusha
- FRR13: Semi-structured interview with a communications officer from the ICTR, Arusha
- FRR14: Semi-structured interview with the Chief of External Relations and Strategic Planning of the ICTR, Arusha
- FRR15: Semi-structured interview with a spokesperson of the ICTR, Arusha
- FRR16: Semi-structured interview with the Chief of Strategic Planning at the ICTR, Arusha
- FRR17: Semi-structured interview with the Telecommunications Coordinator of the ICTR, Arusha
- FRR18: Semi-structured interview with the Chief of Human Resources of the ICTR, Arusha.
- FRR19: Semi-structured interview with a human resources manager at the ICTR, Arusha.
- FRR20: Semi-structured interview with an officer in charge of training at the ICTR in Arusha.

FRR21: Summary of ICTR completion strategy obtained from the ICTR.

FRR22: Summary of the ICTR training policy.

FRR23: Summary of a two year strategic plan of the ICTR dd 2 April 2005.

FRR24: Information brochure 'ICTR Challenge to Impunity' Arusha, November 2006.

FRR25: Notes from conference on approaches towards the post-conflict development of Northern Uganda, Gulu, 20-21 November 2006.

FRR26: Information brochure 'Umusanzu Mu Bwiyunga' ICTR. November 2006

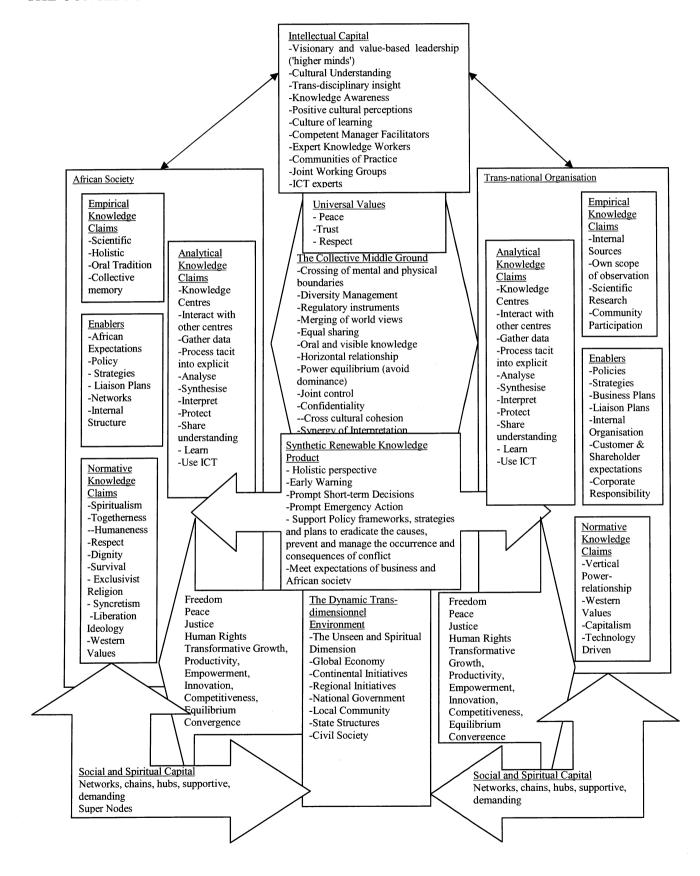
FRR27: Summary of completion strategy of the ICTR, Arusha, November 2006.

FRR28: Summary of strategy of the external relations and strategic planning section of the ICTR.

FRR29: Focus group discussion at the African Institute of South Africa followed by semi-structured interview.

APPENDIX B

THE CONCEPTUAL FRAMEWORK



The conceptual framework for analysis serves as guide for field research as follows:

- Guide research to consider the advantages of the multi-disciplinary, interdisciplinary, and trans-disciplinary approach in developing a new theoretical model that would not only contribute to the knowledge base of humanities in general, but also provides a transferable practical solution to break the cycle of conflict in Africa.
- Guide collection of qualitative data through a combination of research methods to test a set of propositions and follow indicators derived from variables identified in the hypothesis.
- Guide the collection and analysis of data to focus on the knowledge dimensions of unresolved conflicts in the Great Lakes region, in cooperation with leaders, managers, and experts involved in specific cross-cultural and cross-national cases in the area, which represents different worldviews.
- Guide the analysis of data to allow for the eventual convergence of worldviews on what a synergised middle ground should be.
- Guide the interpretation of empirical data through abductive logic to identify
 KM principles and practices.

The *multinational business* as entity refers to perspective of the organisation based on an own scope of observation and scientific research against the background of a normative knowledge foundation that represents the society the business originates from. It also implies internal drivers such as policy frameworks, strategies, and business plans and the adaptation of internal organisations to meet the challenges of participation in trans-societal KM and the capacity to process and merge all knowledge received from other communities or organisations with its internal knowledge base.

The collective middle ground (CMG) refers to the way in which knowledgeable people move across mental and physical boundaries in a new trans-disciplinary paradigm of peace, personal trust, and respect to manage data collection, process information and interpret a synthesis of knowledge collectively and intra-actively to reach a new understanding. CMG reflects trans-disciplinarity in terms of how worldviews can be merged in a spirit of equal sharing, horizontal power relationships, joint control, cohesion, synergy of interpretation and learning to find joint solutions for challenges such as conflict resolution in Africa, using regulatory instruments.

Intellectual capital refers to how the visionary and wise leadership, competent managers, expert knowledge workers of both trans-national organisations and African communities apply their cultural understanding, trans-disciplinary insight and awareness to make wise decisions based on the renewable knowledge product as part of joint working groups or communities of practice.

Social capital refers to the network of centres of knowledge that links intellectual and social capital as part of allied business clusters, linking entities in a dynamic global environment that can be informative and supportive but can also make demands or exert pressures on an African society, sometimes in an exploitative vertical power-relationship.

A synthetic renewable knowledge product is the synthesised outcome of the process of KM in the CMG characterised by a holistic perspective that provides early warning of conflict, a framework for policy formulation and strategy, short-term operational decisions and emergency actions.

The *dynamic trans-dimensional environment* can be described as the environment that both dictates and is determined by knowledge claims from African society, multinational business, and the CMG. It is the 'arena' where the modern global knowledge economy, continental and regional initiatives, the programmes of national government and state structures and civil society meet one another, including the sometime unobservable spiritual or psychological dimension.

The expectations of African society and the trans-national organisation means shared expected outcomes including peace, freedom, transformative growth, self-empowerment,

innovation, competitiveness, equilibrium and convergence towards the ultimate outcome of emancipation and revival of Africa (the African Renaissance) as a result of the convergence of indigenous and modern global knowledge frameworks and the congruence of intellectual capital and social capital.

APPENDIX C

QUESTIONNAIRE FOR FIELD STUDIES

The following questionnaire was used for the main study as guideline for semi-structured qualitative interviews and internet surveys:

Theme	Acholi	Gacaca	ICTR	Identified Conflict Management Principle or Practice
Collective Knowledge Management for				rinciple of Fractice
Conflict Prevention (CKM for CP)				
Realm 1: Managing the Collective				
Memory of the Village Community				
How are the collective memory and				
narratives used for conflict resolution?				
How are the empirical knowledge				
claims of traditional knowledge used for				
conflict resolution?				
How does holistic knowledge				
manifests?				
How is spiritualism knowledge claims				
managed?				
How do the values of Ubuntu				
(togetherness, dignity, respect)				
manifests?				
How are the values of justice and				
human rights managed?				
How are the expectations of economic				
and political emancipation managed?				
How is syncretism managed?				
How are the Western values of human				
rights and capitalism managed?				
How is liberation ideology managed?				
Realm 2: Knowledge Centres in African				
Society				
How are knowledge hubs or centres				
between e.g. the community, churches,				
community, onarones,				

business and government formed? How do centres communicate with other centres? How is research done in the centre of the specific sample? How is tacit data managed in the centre of the specific sample? does formal analysis How information take place in the centre of the specific sample? How are insights shared? How are ICT systems used? How is interactive learning taking place? How is knowledge protected? Realm 3: The Collective Middle Ground How is a shared vision between African society and the trans-national organisation achieved? is cross-cultural cohesion How achieved? How is a trans-disciplinary paradigm achieved? How is an atmosphere of mutual trust promoted? How is an atmosphere of mutual respect promoted? How is pluralist or inclusive religion managed? How does African society or the transnational organisation react on approach for collective KM? are mental physical boundaries between African Society and TNO successfully crossed? How is cohesion obtained between A and TNO? How is collective learning taking place? How is oral and visible knowledge shared between AS and TNO?

		T	 	
How is the merging of worldviews				
achieved between AS and TNO?				
How is quid pro quo information				
exchange done between AS and TNO?				
How is equal and horizontal power				
relationship maintained between AS and				
TNO?				
How is joint control over procedures				
and knowledge exercised?				
What regulatory instruments are in				
place?				
How is synergy in interpretation				
between AS and TNO achieved?				
How are joint solutions found?				
Are policies to direct CKM activities in				
place?				
Is a strategic framework for CKM in				
place?				
How do business and implementation				
plans include CKM?				
How does corporate responsibility plan				
include CKM?				
How does the international liaison plan incorporate alliance forming and networking?				
How is the internal organisation of the TNO structured to manage CKM?				
Realm 4: The CKM for CP Product	. 2,111174			
Is a holistic perspective clearly visible?				
How do the internal sources of the TNO				
and own scope of observation dominates the holistic picture?				
How the TNO physically involved in the community?				
How does modern scientific research contribute to the holistic knowledge picture?		·		
How do Western values dominate the holistic knowledge picture?				
How do ICT systems drive the knowledge picture?				

	T			
Is the African knowledge foundation				
clearly visible?				
Does it spell out possible scenarios and				
suggest the most probable scenario?				
Does it provide early warning?				
How does it make short-term decisions		·		
possible?				
Does it enable emergency actions?				
Can it be used for policy and strategy				
formulation and planning for CP?				
How does it address the expectations of				
AS?				
Is it a synthesis of global and				
indigenous knowledge?				
Does it include original information				
inputs obtained from tacit and oral				
knowledge sources?				
How many participants contributed?				
Does it reflect different worldviews?				
Was it interpreted by wise people using				
instinct and intuition?				
Were local experts involved in the	-			
production?				
Does it reflect synergetic thinking?				
Was it disseminated in time?				
What are the effects on policies?				
What are the effects on strategies?				
What instruments are in place to				
monitor knowledge production for				
operations?				
How does it influence decisions on				
conflict prevention?				
Realm 5: Social Capital				
How does the entity interact with the	ļ			
spiritual dimension?				
How does the entity function as part of				
a global network?				
How does the entity function as part of				

			The state of the s
a continental network?			
How does the entity function as part of	ļ		
a regional network?			
How does the entity function as part of			
a national network?			
How does the entity function as part of	1		
the local community?			
How does the entity function as part of			
formal state structures?			
How does the entity function as part of			
formal civil society structures?	: -		
Realm 6: CKM Meets the Expectations	:		
of AS	ı		
How is AS empowered by knowledge?			
How is AS emancipated by knowledge?			
How the competitiveness of the TNO			
and AS is enhanced through	1		
knowledge?	1		
How are imbalances within AS			
redressed through knowledge?			
How do AS converge with the rest of			
the world through knowledge?			
Enablers of CKM: Intellectual Capital			
and ICT			
How is a culture of learning promoted?			
How visionary leadership provide			
guidance?			
How does manager facilitator overcome			
constraints?			
How do joint trans-disciplinary working			
groups and COP function?			
Are there knowledgeable people with			
-cultural understanding			
-knowledge awareness			
-positive perceptions of Africa			
Are there people with ICT skills to:			
Manage a database with indigenous			
knowledge content			
Access the Internet			
Transfer data in constrained	,		
		 	1

circumstances including linking with			
remote communities			
Operate an integrated ICT system with a			
bilingual interface			
Constraints to CKM for CP?			
Protection of information			
Exclusive objectives			
Lack of objectivity			
Time management			
Language differences	1		
Communication difficulties	,		
Security difficulties			
Lack of infrastructure and facilities			
Constraints addressed by leadership			
Facilitation by managers			
Innovation by experts			
Ability to prevent immediate crises			

APPENDIX D

OVERVIEW OF RESEARCH PROCESS

