# **Environmental Perceptions** in an Urban Environment

Report from a Minor Field Study in Nairobi, Kenya, January-March 2007



"The world can only be 'nature' for a being that does not inhabit it, yet only through inhabiting can the world be constituted, in relation to a being, as its environment."

(Ingold 2000: 40)

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#### **Abstract**

This thesis is an analysis of the modern phenomena and attributes of the city of Nairobi and its inhabitants. It has two purposes where the first is to account for the environmental perceptions of Nairobi citizens. The second purpose is to analyse how relevant the modern dichotomy of nature/culture is in Nairobi in relations to the environmental perceptions. This thesis has four main theoretical aspects which consist of: dichotomies and dualisms, three paradigms of human environmental relations, modernity, and the alleged links between poverty and environmental degradation. A State of the Environment report made by the Kenyan National Environment Management Authority is accounted for and analysed to give an insight to the official version of the Nairobi environmental problems. This is followed by the empirical material and an analysis of these in relations to the theories. The empirical material is divided into four themes which are; definitions on environment, nature and culture, opinions and description of the environment and its problems, religious and philosophical outlooks on human-environmental relations and a comparison between the rural and urban environments.

The final discussions reach a conclusion which establishes that Nairobi's public authorities are guided by the modernity notion but quite unsuccessfully. Nairobi citizens do not embrace this modernity and its particular nature/culture dichotomy. Instead they point out the connections between culture and environment, perception and action. Nairobi inhabitants, especially the ones in the many slums, suffer from the failed modernity project and the author concludes that the environmental insight these people possess should serve as the guiding star to solve the environmental problems. The author further reaches the conclusions that religion, rurality, and environmental awareness and insight are key factors to proving the modern dichotomy of nature/culture to be irrelevant in the context of Nairobi citizens.

Key-words: Nairobi, Modernity, Dichotomy, Environmental perception, Urban, Up-country, Poverty, Slum, Environment, Culture and Nature

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# Introduction – the case of Nairobi

About half of the world's entire population now lives in urban areas (Internet 1)<sup>1</sup>. The figures on how many people actually live in the city of Nairobi, Kenya, varies, but the cities in Africa are growing and Nairobi is now one of the biggest cities on the continent (Internet 2, Gugler 1996: 211). This change in demographic location will and have had an affect on the way people view the environment, their surroundings and nature. The urbanized people are still dependent on what the ecosystem has to offer and are thus subject to the same laws and prerequisites as rural citizens or any other organism. This may not, however, be as apparent to them as it may be for rural inhabitants, which we have seen in western contexts (e.g. Löfgren & Frykman 1979).

"Our perception of our physical environment is inseparable from our involvement in it" (Hornborg 2001: 10) is a statement which clearly takes a stand for an integrated world-view, where we can recognize that the way we imagine the world is also part of actively constituting the world. This means that environmental problems (partly) derive from how people perceive the environment as perception and action are closely interrelated. Thus environmental perception is basic to comprehend human understanding of nature and nature-culture interaction. The quote above is rejecting the dichotomy of nature/culture which is separating rather than integrating humans and the world we live in.

There are, within the modern sciences, two ways to view the relationship between nature and humans; one is of ecological determinism; that is that the ecological prerequisites shape society. The other one is the more complex one where a mutual affect is considered for and where nature shapes human life, which in turn shapes nature. Taking on the latter perspective means admitting that there is a constant co-development of humans and the nature or environment they reside in (Knox & Marston 2003: 153, Eriksen 2000: 38f). Generally speaking, there are also two different ways to perceive the environment; the modern western context and notion and the ones of rural inhabitants of the non-western world. These have all been well researched by anthropologists throughout the history of the subject. Within the context of human ecology there is however a group of people, a third side, which is already significant and steadily growing to which I hope my research can be complementary. To this third group I count the people of expanding cities in the South. The people of Nairobi do not live in a western society, nor are they hunter-gatherers, pastoralists, nomads or farmers. This is one of the aspects that make this particular group so interesting, as they themselves bridge the dichotomy between rural and urban.

What is defined as urban varies immensely across the world, and what makes a place urban is not quite clear. However, it must be considered a special type of cultural landscape, which differs from the non-urban landscape, both in Kenya and globally (Hall 2002: 17f, 28f). The cities of the world today are often permeated by an early or current industrialism and thus often function as technocratic cores and are as such often the origin of environmental problems; the emerge of the modern urban area in the western world has been accompanied by a disembedding from nature (Giddens 1990, Atkins et al 1998: 198f, ). Cities have existed also historically for about 12 000 years, and in East Africa there were some ancient civilisations with advanced cities (Gilbert 2002: 363). However, the cities of today are quite different from historical ones in more than one aspect. The ones of today are synonymous with industrialisation, and are specific in their pace of growing, rate of expanding and intensity (Knox & Marston 2003: 423f, Giddens 1990: 16f, Macionis & Plummer 2005: 642ff, Atkins et al 1998: 197-210). What Giddens (1990: 63) also emphasises is that the modern city

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<sup>&</sup>lt;sup>1</sup> All Internet sources will be accounted for in their entirety in the bibliography

is synonymous with the industrial and thus modern landscape, and is created by human, making it an altered environment.

# Statement of purpose

In this thesis I wish to investigate the dualist notion which has so long dominated western science and which has also been the focus of criticism; the dichotomy of nature/culture.

## The <u>purpose</u> of this thesis is to;

- 1) account for how Nairobi citizens view human-environmental relationships, i.e. their environmental perceptions
- 2) analyse how relevant the, in modernity created nature/culture dichotomy, is in relation to those environmental perceptions in the context of Nairobi

The key to the thesis lies in the nature/culture dichotomy and the theories on this will be accounted for in the beginning of the theory chapter. The reader should keep the aspect of the dualistic notion throughout the reading of the thesis. A section on dualism and dichotomies is included in the theoretical framework chapter. To further analyse the empirical material in relations to the dichotomy I make use of three important theories. These are;

- The three paradigm approach which is used to define human-environmental relationships from three perspectives; one integrated, one responsible and one exploitative (Pálsson 1996).
- Examining the theory on <u>poverty and environmental degradation</u> as interlinked phenomena and as part of the modernistic project (Guha & Martinez-Alier 2000, Prakash 1997).
- The third one is the concept of <u>modernity</u> by Giddens (1990). This theory will be used to analyse and estimate how integrated Nairobi citizens are in the modern societal context and if the notion of disembedding (and the related dichotomy of nature/culture) is applicable.

Other authors and theories will also be mentioned as well as the State of the Environment Report by The Kenyan National Environment Authority (NEMA 2004). These theories, together with the empirical material and analysis of this, will be interconnected with each other, and should be seen in relations to the dichotomy and the modernity concept. The thesis moves between the sub-disciplines of environmental anthropology, environmental sociology and culture geography but also touches analytically economy and religious anthropology, as well as ethnology, urban geography and also uses material provided by and from the Kenyan government.

# Earlier research and the importance of urban studies

Nairobi is a city and place that has been well researched in the past and present and its inhabitants have been subject to numerous field studies. In the field of human ecology, my personal experience is that the existent research can be supplemented, as is the case with many other fields in all scientific subjects. In this thesis I try to highlight the inside perspective of Nairobi's citizens, giving them a chance to themselves define their interrelationship with nature, environment and culture in the first decade of the 21<sup>st</sup> century.

The question is if people outside the western modernity context make no division between culture and nature? Of course not, Pálsson and Descola (1996: 9) claim, but the divisions have different meanings, depend on context and are not as clear-cut. What Pálsson and Descola advocate, as well as the subject of human ecology, is an increased exchange between disciplines and a bridging of the nature-culture dichotomy. Is this approach a way to be self-critical for anthropologies and a simple way for me, as a human ecologist, to ride the

wave of self-criticism? In the case of the former question it is healthy to do so, but it is also important to acknowledge that the western epistemology is not universal and that others should have the chance to themselves become masters of their own human-environmental relationships. Further the nature-culture relationships are changing also in the western world. Processes and relations are filling the seats of objectification and top-down approaches of these relationships across the world. In regards to the latter question, I might be, but if not more than one researcher contributed and tested theories from different perspectives, one could wonder why we bother with science and research at all. A subject always has the risk of being overexploited, but I still hope to contribute with some insights on the aspect of the inside perspective of Nairobi citizens on human-environmental relations in present-day Kenya.

Many anthropologists and researchers have examined and researched the rural parts of the South and the world. Anthropologists who work in Europe and North America have increasingly focused on the field of urban citizens (Eriksen 2000: 12). Times are changing and the rate of urbanisation is increasing also in Africa and that is difficult to disregard. It is apparent that cities, for different reasons, are becoming the new and most frequented place for human dwelling and it thus must be treated like that. In the entire region of Africa, urbanisation is regarded to be the most powerful process and it thus requires special attention (Wariboko 2003: 633).

Agriculturalists, however, worldwide are the foundation of civilisation and life as we know it, in its modern and semi-modern form, and will probably remain as important if not even more important as the rural areas of the world as they diminish in numbers. It is important to understand that people in Nairobi hold tight connections to the rural parts of Kenya and more than often consider them to be their homes. That is even if they are born and raised in Nairobi. However, they still are urban inhabitants, but these connections make them even more interesting.

#### Descartes and his critics

The dichotomy of nature/culture is old, deeply rooted in, but also heavily criticised in western science. Many of the main critics can be found among anthropologists who themselves have experienced that this dichotomy is more than often not relevant to people who are not born and raised in a western scientific tradition (Pálsson & Descola 1996: 3ff). In short, the division of nature and culture is a western or Judaeo-Christian invention which was refined by the thinkers of the enlightenment. Thinkers such as Thomas Hobbes, Francis Bacon and Rene Descartes stand out as spokesmen of this notion (Knox & Marston 2003: 158, Pálsson 1996: 76). Nature is since this time separated from culture, just like the body is from the mind. This is, however, not the belief of many other cultures, societies and religions around the world, as many anthropologists through their field studies have shown (Pálsson & Descola 1996: 6f, Hornborg 2001: 136f).

Humans and the environment are continuously interacting as part of a bigger system. The word nature is in western scientific context used to define the other side of the cultural fence. It is not part of the human world, but something, which one can visit and look at (e.g. Frykman & Löfgren 1979). To many other human beings, of different cultures, it is quite the opposite – nature is where they live and where they make their everyday lives work. Thus they have no need for a word to separate them from their world but rather words to increase or emphasize the variations of this world.

To add further empirical material to the critique of the dualist thinking may seem unnecessary but just the same this thesis is an attempt to test the relevance of the dichotomy. In terms of development and sustainability the citizens of Nairobi is a group who stands at a junction; Nairobi and its' citizens are not a totally integrated part of a western state of

physical or mental mind and still it is a society that has moved away from the rural way of life. This puts these people in a new focus of the dichotomy and to a point where a choice has to be made; to embrace western notions or not. The modernity perspective (Giddens 1990) is also an important aspect and it is from that point of view I will take on the empirical material and the analysis of the dichotomy.

# **Disposition of thesis**

## <u>Introduction – the case of Nairobi</u>

This first chapter will give a background to the field study on which this thesis is built on. Here I also specify what my purpose is, as well as present a background to the theoretical framework the empirical material is analysed upon including a background to the dichotomy and its' relevance to the subject. I also present the limitations of the study and thesis and the relevance of the thesis outside my own interest. A section where important key words are defined is also included.

## Methodology in field

The second chapter contains a thorough account of the methodology used for the field study and also criticise some of the methodological choices I have made and reflect on my role as a researcher is accounted for.

## Theoretical framework

An account of the most relevant and important theories for the analysis of the empirical material, follows as the next chapter. This chapter is divided into four sections, one for each theoretical background, starting with the most important one; the dualist notion.

## The official version

To begin with and, to put the empirical material (as in the interviews) in the Kenyan context I account for and analyse the official description of the problems of Nairobi and the Kenyan environment, made by the National Environment Management Authority in Kenya.

## The non-officials' version

The core chapter, (the second part of) the empirical account and analysis, contains an account for the interviews in detail. For this I have divided the questions into four themes which in turn will be gone through and exemplified from the answers to the questions respectively. A connection will of course be made to relevant theories. The natural follow-up to this is to put the empirical material in relation to respective theory with help of the research questions at hand.

### Discussion and conclusions

In the last chapter conclusions will be drawn from the material and theories presented and an attempt to see if I have been able to arrive at my purpose.

#### **Delimitations**

This is not a study which is representative for all Nairobi citizens, neither of all people in urbanising centres in Kenya, Africa or the world. The empirical material is based on the questions I have posed to my informants, and may or may not be biased. My choices of questions and literature have been done with consideration and reflection and to the best of my knowledge and possibilities. Being a student of human ecology, my research is of course biased in the sense that this discipline is my frame theory and makes up important parts of my cultural filters as a person and researcher.

This thesis does overlook the macro perspective at large, and does not include historical records or socio-economic analysis in particular. Deliberately I have chosen to write this thesis from the perspective of the present, i.e. to not include much historical or sociological material e.g. on Kenya's colonial past, economic development or political change. To add

such material would have been interesting and up-lifting for the thesis, but space limitations as well as a wish to focus on my own empirical material, caused the decision not to include it as such. The focus was to picture the present state of the informants as Nairobi citizens of today; the historical aspect has been made by others and can also be seen as a level which would be appropriate to include in any further research on the subject. This thesis attempts to make use of the actor or bottom-up perspective in its research process as well as in the analysis.

No explicit gender perspective has been used in this thesis and its preceding fields study, although the interview material was deliberately collected in a way that would strive to balance the amount of men and women among the informants. The thesis does not focus on tribal perceptions and I do not go into detail about how different tribal backgrounds affect the informants' answers. Instead I have chosen to see the informants as individuals and part of their present socio-economic status. However I am aware that tribal belonging might affect their answers, something which I also acknowledge in the course of the thesis.

I will give all my informants full anonymity, as I have promised them and on request. In some cases they will be subject to details about their employment, age, gender and/or economic status, but not to the extent that they could be identified. Nor are any of the photographs portraits of any informant. The anonymity can be perceived as a problem for this thesis' reliability, but was necessary for the gathering of the material and thus for the making of the thesis. One should be aware of the subjectivity of me, and my co-workers', when choosing informants, as well as the subjectivity of the chosen secondary material for the analysis of the gathered material. Under the circumstances, I however, consider the methodology at hand as sufficient, although there can always be room for improvements. To ensure a higher level of objectivity the interview questions and an altered, to anonymity, list of informants have been attached in appendixes 1 and 2 of this thesis.

# **Definitions of key terms**

In this part I will define some of the key terms that will be frequently used throughout this text. Depending on the complexity and/or controversy of the terms to be defined, the definitions will vary in length, not emphasising one or the other more. As definitions of things and phenomena tend to change over time it is important to keep in mind that the definitions in this section are relevant to the context of this thesis but are not static in time and space.

### Environment

"1: the circumstances, objects, or conditions by which one is surrounded, 2a: the complex of physical, chemical, and biotic factors (as climate, soil, and living things) that act upon an organism or an ecological community and ultimately determine its form and survival, b: the aggregate of social and cultural conditions that influence the life of an individual or community, 3: the position or characteristic position of a linguistic element in a sequence" are the definition(s) made by Encyclopaedia Britannica (EB) (Internet 3).

In this thesis it is used as defined above, apart from in the chapter where empirical material is accounted for and the informants' definitions are in focus.

## Culture

When it comes to defining culture I will refer to the famous definition made by Edward Tylor from 1871: "Culture or civilisation is, in its' widest ethnographical sense, the complex unit that in itself consists of knowledge, faith, art, moral principles, customs and all other abilities that humans as a creature of society engages in" (Tylor in Eriksen 2000: 15, *my translation*). What one must not forget is that culture is one of the most debated terms in anthropology and ethnology. Generally speaking most anthropologist seem to agree on that culture is the way

people lead their lives and traditionally distinguished by non-natural behaviour; that we eat is natural but what we eat and how we eat it are cultural expressions (Eriksen 2000: 43f)<sup>2</sup>. On the other hand culture and the environment define each other in their interaction codeveloping what is the current culture and environment respectively. This gives that although environment and culture are two different things they are intertwined to the point of being inseparable in practice but not in theory (Ibid: 43ff).

## <u>Perception</u>

According to Encyclopaedia Britannica, perception is: "1a: a result of perceiving b: a mental image, /.../ 3a: awareness of the elements of environment through physical sensation, b: physical sensation interpreted in the light of experience, 4 a: quick, acute, and intuitive cognition, b: a capacity for comprehension" (Internet 4).

In addition, I would like to add that my opinion is that in relation to the perceived the spoken or written explanation is never adequate. Since the beginning of man, everyone has hade different perceptions of e.g. the environment, but these perceptions are also an expression of the time, context and culture each individual lives in. It is thus, in my mind, probable but not sure that people who share some of these aspects of life also share similar perceptions. The perception can also be controlled by the ruling discourse, scientific news, politics, history and the influence of other people such as one's family. Perceptions may also change according to when the above-mentioned circumstances change or when an individual changes. Perceptions can be shared but never be the exact same, but since they are so hard to express they may sound alike, according to the cultural use of vocabulary, in turned governed by schooling or available vocabulary in the used language.

## Nature

The word nature could probably be even more complex than culture since it has had so many different meanings throughout history and between cultures. The short version from EB is: /.../ 6: the external world in its entirety" (Internet 5). Although seemingly short, this definition does contain a great variety, displaying the multitude and many aspects of the term.

#### Urban and urbanisation

Urban is, according to EB "of, relating to, characteristic of, or constituting a city" (Internet 6). Urbanisation is defined as: "the quality or state of being urbanized or the process of becoming urbanized" and urbanise: "1: to cause to take on urban characteristics, 2: to impart an urban way of life to" (Internet 6). What is also pointed out in the same definition article by EB is that ecologically the urban space is resource demanding, a producer of waste, and dependent on its surrounding rural areas for material, food and other resources. It is mainly biologically unable to produce and thus consuming of both the surrounding environment and of productive land around it. This is an important point to remember and is considered in the use of the terms in this thesis. A further note comes from the statement that urbanisation is "the transition of a country's population from rural society to an urbanindustrial one." (Wariboko 2003: 633), pointing out that the modern city is in itself separated from the rural world.

## Poor and poverty

To be poor is defined as: "1a: lacking material possessions b: of, relating to, or characterized by poverty, 2a: less than adequate /.../8: lacking a normal or adequate supply of something specified" (Internet 7) Poverty is defined as: "1a: the state of one

<sup>&</sup>lt;sup>2</sup> For a multitude of different definitions of culture see Baldwin et al 2006: 139-226

who lacks a usual or socially acceptable amount of money or material possessions" and "cover a range from extreme want of necessities to an absence of material comforts <the extreme poverty of the slum dwellers>." (Internet 7). In the context of my thesis the slum inhabitants are considered to be poor, although there are also other groups which are financially very strained. The difference lies in the state of their housing.

## <u>Up-country</u>

Up-country is an interesting term which I had to learn early on to get some insight to the verbalization of home by Nairobi citizens. Really, in a Kenyan context, up-country refers to any place outside the city, which is not urban. It is, however, more than often used as a general term for home or home-village. Kenya is a big country and it is not easy to keep track of all the little rural areas in the country, thus people speak of up-country or home when they are planning a trip to the rural village or area where their relatives lives. This word is used by more or less everyone, quite frequently and thus I chose to use it in my interviews. This, I reasoned, would make the interview smoother and place me at a more familiar and understandable place for the informants. It is more commonly used than home-village but means exactly what I was trying to say with "the place outside the city where your family lives and you possibly go on visits and you might consider your home" (author's own definition based on personal conversations with Nairobi citizens 22/1/07 – 30/2/07). Even if a few people did not consider their home-village to be their home, they still very well knew what I meant when using the word and thus it helped to erase potential misunderstandings.

## Slum or informal settlement

To avoid misconceptions by what I mean when using the word slum I would here like to refer to the definition made by the US Affordable Housing Institute: *Slum: two definitions* 

- Financial definition. A place with no investment that keeps the costs so low that the poorest of the poor can afford them.
  - *Urbanist definition.* A neighbourhood with minimal or no basic services such as sanitation.

The urbanist defines the condition, the financier defines the cause. (Internet 8)



View of Kibera from the Uganda Railway<sup>3</sup>

 $^{3}$  All photographs used and displayed in the pages of this thesis, including the cover page, are taken and are courtesy of the author; Emelie Kärre, unless written otherwise. The photographs were taken during the period 22/1/07 - 30/3/07.

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# Sustainable development

To define this term I have chosen to use the now traditional and generally accepted definition made by the Brundtland commission: "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs." (Brundtland report 1987). This definition is not unproblematic and has been heavily criticised. It does for instance consider all the different aspects of sustainable development to be equal, which leads to that improvement in social and economic factors puts the environmental factors behind (Opschoor 2003: 497ff). Ergo, the environment is exchangeable for economy in the definition of the Brundtland commission. I do not agree with this definition of sustainable development, however where it is mentioned in this thesis, unless stated otherwise, it is the above quoted definition I refer to. I would like to point out that 'sustainability' and 'sustainable' is not an exchangeable term for 'sustainable development' in this thesis.

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# Methodology in field

#### Introduction

The methodology of use here can be described as ideational as the theory behind is that changes in mentality also bring changes to the material world (Fetterman 1999: 6). This type of research from an emic perspective, i.e. the native's is at the heart of many anthropological studies and here becomes an important perspective. To find out what the people of Nairobi perceive is at the heart of the research and this thesis. It is also innate in this perspective to not be able to present any objective reality or truth but the subjective of each participant and/or their collective perceptions. I, as a researcher have, however, tried to remain as objective as possible and needed to ensure the quality of the research and thesis. An etic perspective has been put on the analysis of the research as I have tried to place these perceptions in a scientific norm and in relations to different humanistic and social scientific theories (Fetterman 1998: 20ff, Eriksen 2000: 38).

#### **Demarcations**

Only people who live permanently in Nairobi and have so for at least a year are included in the study. The questions were focused on the informants' general perspective on environment and culture and their interaction with these. I have, however, not gone into details about their lives and do not include any specifics about their personal life. This thesis is made from a limited sample of Nairobi citizens under a short amount of time. Although the thesis and prevailing field study's holistic intentions, it cannot be considered to give a full picture of the perceptions of Nairobi citizens (Fetterman 1998: 19, 24f).

The thesis has been inspired from the cognitive theory tradition in so that an assumption has been made that the way the informants verbalise the environment can provide information on their way of thinking and their cosmology (Fetterman 1998: 6). This is one of the most important assumptions that preceded the field work, as described above. That language is an important aspect of understanding human-environmental relations is not new, but according to Maffi (2001: 24f) it has until recently not been very well researched. It is of course even more interesting when one conducts interviews on the informants' mother tongue, but even if not so it provides something extra to the material on human perceptions of the environment. Maffi (Ibid: 25) means that ecological knowledge is encoded in the language and thus interesting to the topic of human-environmental relations. My belief is that since perception is so closely tied to action, and the only other way of expressing ones perception, apart from action is by verbalising it. In verbalisation one can get close to the perception, since it is the individual's way to express their thought and ponderings, but also an indicator of cultural currents

Although the material is not small, it is limited to the twenty-eight interviews I had the chance to conduct. The field I worked in was quite large and very hard to make one accurate image of; thus the material presents the view of my informants, although they act as an indicator of the general environmental perceptions of Nairobi citizens. The informants were selected to be from various backgrounds and socio-economic status, but one must not forget that, although perceptions are guided by the current streams in society and its history, there are as many perceptions as human beings.

# Working in the field of Nairobi

# Initial plans, strategies and introduction

Due to the nature of the MFS-study the original plan I had before entering the field was adapted to the conditions at hand. The methodology was one of a micro-level anthropological study with informal/semi-structured interviews with a selection of Nairobi citizens. The interviews would be on the informants' perceptions on different aspects of environment, nature, culture and their interactions with these.

Field studies have a tradition which is interrelated with ethnographic and anthropological research and the developments of these subjects (Eriksen 2000: 15-21). The field work enabled the ordinary people's opinions and perceptions to be known by others (Öhlander 1999: 11). With time, the individual focus has been replaced by a more complex one where the interrelationship between individuals and their social setting is studied. Also the reflexive element in ethnology has been more frequently debated over the last 20 years meaning that the role the researcher plays in the field is accounted for and reflected upon in the material that presents the field work, such as this thesis. I find this to be a very important element of the field work since your presence as a researcher always has an impact on your informants and stakeholders during the field study (Öhlander 1999: 12ff, Kaijser 1999: 35, Pripp 1999: 44f). Thus, this discussion will be an important part of this methodology account.

# Orientation phase

When I arrived in Nairobi, the first thing on my agenda was to discuss with Agevi and Mbatha what kinds of people I wanted to interview, why, what my questions were and what I wanted to find out, i.e. set up a plan and a time schedule. The questionnaire I presented was revised with the help of Mbatha to cover what we perceived to be relevant and important themes to Nairobi citizens. Elijah Agevi was my supervisor in field and Paul Mbatha was one of the people working in The Safer Nairobi Project, run by Agevi; both of them provided me with their assistance and expertise

According to the principle of pragmatic systematics the field study is a process of learning. When doing a field study it is important to have a plan and goals of knowledge before getting started, but it is equally important to be flexible and adapt to the circumstances and prerequisites of the field. There has to be space for the unexpected or a different, even more interesting angles to your research question (Kaijser 199: 27). It was important to test and discuss if the goals and methods I had planned for where relevant in the context of my field and thus these initial discussions and revisions were not only helpful but necessary (Öhlander 1999: 13).

# Interview strategies and observations

The questions in the interview, all have a specific purpose which responds to different aspects of the nature/culture dichotomy. During the course of the interviews I noticed that it worked better to have more direct questions rather than indirect ones, despite common methodology (see ex. Fägerborg 1999: 63). From my experience in the first two interviews, the indirect questions were misinterpreted and questioned. The more direct questions were however more difficult for the informants to misunderstand and were thus easier to answer.

My first two interviews were useful for me to be able to revise the questions and make proper changes; they can be seen as a pilot study (together with the first 1-2 weeks of observing, discussions with Agevi and so on) (Kaijser, 1999:29). The revised questionnaire was then used throughout the rest of the interviews to get a more coherent material.

In this first phase, as well as throughout the study, I spent a lot of time observing, not only in peoples' homes and workplaces, but also generally. This include what the city and its'

people are like, how they seem to interact, how the physical environment differed between the places I went to, the frequency of litter boxes in the street and how people responded to my presence, to mention a few examples. Throughout the study it was very interesting for me to do these observations to get some sort of image of everyday life, an important anthropological aspect (Kaijser 1999: 24f) but also of the diverse settings Nairobi offers as well as an introduction and insight to the field. This was a way of approaching the field, experiencing the diversity of Nairobi and working towards some routines in a crazy city (Kaijser 28f). Many of my observations were, together with the interviews, reflected on and written down in the, for researchers in the field, mandatory field journal. These observations gave me a perception of the city that the informants reside in and how it affects them in their environmental perception. This is also a material that shines through in the descriptions, analysis and conclusions I will draw. To arrange this material is a way of processing the field study and all the impressions one is hit with every minute of the day during the time in field (Kaijser 1999: 29ff, 36f, Öhlander 1999: 18).

## Description of the field

The Nairobi environment is very diverse and complex. The places I visited were many but my interviews were focused to some particular areas. Most of the interviews were made in the down town part of the city, this due to that many of my informants were at work and I interviewed them in connection to their workplaces or during breaks. However, I also visited the industrial areas and the neighbouring working class residential areas which are among the oldest in Nairobi.

Throughout the thesis I have and will discuss the slum areas that I visited and these deserve a description so that the reader also can get a picture of these environments. During my stay I visited the slums of Kibera, Korogocho, Kariobangi, Mathare/Huruma and Kayole. The two latter ones I will refer to as Mathare or Mathare Valley if not the full name. Kayole is not really a slum but seemed to be subject to many of the same problems, and are also neighbouring to the slums of Mathare Valley. The interviews in this thesis to which I refer to as slum interviews were conducted in Kibera and Mathare Valley. These experiences were horrendous but invaluable and added to the quite complex and very varied picture that is Nairobi. To give a specific and more in-depth description of the field here would become very extensive due to the field's diversity. Instead I hope that the reader will get an image of the environments during the course of this thesis through the text and the pictures.

# Anthropological approach

The micro-level nature of the study could be debatable in the sense that does focus on a small group, a limited outlook within the social unit of Nairobi citizens, typical for micro-level studies. On the other hand it has some macro-level features since the study aimed to find a sample that would point in the direction of what people in the context of the informants (urban citizens with close ties to the rural society, living in an expanding urban society between modernity and traditionalism) perceive in general. Thus it wishes to provide some sort of potential insight to a large pictures although I do fully comprehend the limitations in doing so (Fetterman 1998: 27ff).

When doing anthropological research one of the most important aspects is to communicate with people who are relevant to the study and to try to discover their inner universe (Fägerborg 1999: 61). The aim was to be able to go more in-depth and somewhat adapt the interviews to each informant and also capture the spoken language of each individual. In an interview situation the language that the informant normally uses is more properly conveyed because the situation is much more direct (Ibid: 6, 54).

Most ethnographers in field use informal interviews because they are more like conversations and present more of the informants' thoughts and views on different matters (Fetterman 1998: 37ff). During the course of the field work I discovered it to be more useful to have a flexible, semi-structured structured questionnaire.

In the aspect of open-ended or closed-ended questions I would also here like to place my questions in the middle of these categories. This is due to that my questions were quite specific and many aimed to be able to compare data from different informants. On the other hand the questions were interpretable, as can be seen in the diverse set of answers some questions resulted in (Fetterman, 1998: 43f, App 4).

## The selection of informants

When I arrived I did not know anyone in Nairobi and I was thus totally dependent on the help of my supervisor and Mbatha to book interviews and get in touch with informants. The one who worked with me in the field was Mbatha. His assistance can be seen as a limitation but on the other hand it can also be seen as a prerequisite to be able to enter a field to have one or two contact people which fill the function to introduce you (Fetterman 1998: 33).

The control I initially wished to have over the selection of informants turned out to be difficult to meet. The control I had was of a secondary nature, meaning that I expressed what kinds of informants I wished to interview and Mbatha and Agevi arranged for these. The selection turned out quite well, mainly due to the fact that we had an open communication and that Mbatha and Agevi were sensitive to my requests. All the interviews, with a few exceptions, were made in the presence of Mbatha. This was in some respects both necessary and useful, apart from his role as an interpreter, a subject I will discuss thoroughly further down. The security situation in Nairobi sometimes also made it necessary for me to be accompanied to certain locations, and I was obliged to use the public means of transportations. The systems for public transport are somewhat complicated, which meant that Mbatha's help was most welcomed and at times absolutely necessary for me to be able to get to the arranged location for each interview.

### Interview situations

After having made my first two interviews I revised the question outline to its present form. The relevance of each question was analyzed during each interview, but also it was quite easy to tell after a few interviews which questions were relevant on a general basis. That practice makes, if not perfect, than at least better, was evident for me during my interview experiences (Fägerborg 1999: 66). When executing the interviews I used the technique of having the questions on small pieces of paper piled up in my hand (Fägerborg 1999: 64). The answers were written down in a larger notebook. The small scale question papers made it possible for me to keep eye-contact with the informants and were an attempt to make the interviews less formal.

To give an insight to what an interview situation was like, I will here give a general description of the course of events. I was often introduced by Mbatha who beforehand had contacted the informant to arrange for the interview. In the beginning of each interview I made it to principle to take command and clearly state my position as a researcher. Still the tone was of course friendly and humble. The approach I used was to in a correct manner introduce myself and my project; my name, nationality and purpose of my research and presence in Nairobi. On the request from the informant, for more information I answered as well as possible (Fägerborg 1999: 64ff). People often questioned their position as in interesting person to interview. Foreigners and people with authority are high up in the mental hierarchy of Kenyans. Thus it was sometimes difficult to explain to my informants that I had little interest in authorities but wanted to hear the personal views of regular people. The

introduction was followed by my account for basic ethical guidelines (Pripp 1999: 51ff, Fägerborg 1999: 58f, Internet 9). At the end of the interview I got some background information off of each informant (App 4).

# Recording and transcribing

When conducting interviews there is a necessity to record the interviews in one way or another. The most recommended is to use a recording device so that one does not miss out on any words, nuances and trails (Fägerborg 1999: 67, Fetterman 1998: 64). With this methodology the interviewer can stay more relaxed and focused on the interview and informant, knowing that a proper transcription can be done later without having to fear that important things are lost. Also voice-recording puts high demands on the surrounding that the interview takes place in. A recorder takes up all available sounds and thus can the recorded interview be heavily disturbed by background noises. However, this is considered to be the best way to record interviews, with many advantages (Fägerborg 1999: 67f, Fetterman 1998, 64f). The traditional way to record an interview is taking notes. Of course this takes some of the interviewer's attention away from the informant and can also be a bit distracting to the informant who may be curious of what is written and also may be concerned that the interviewer is missing out on important information. However, taking notes can be preferred to voice-recording since it is more comfortable for the informants and demands less of the setting (Fägerborg 1999: 67f, Fetterman 1998: 63ff).

I found that taking notes was the only realistic way to go through with the interviews, since many of the problems with voice recording, mentioned above, arose. The following transcriptions (Fägerborg 1999: 68) took place as soon as possible after each interview. A problem here was that sometimes I did more than one interview per day resulting in that the transcriptions sometimes suffered. To transcribe interviews as soon as possible is very important, if nuances and choices of word are to be remembered (Fägerborg 1999: 68f). The informants displayed a broad spectrum of loquaciousness, insight and interest in regards to the subject. Thus, every interview differs from one another, resulting in that also the notes vary in extent and detail

# Working with an interpreter and conducting slum-interviews

About half of my interviews have been done with people from financially and educationally poor conditions, most of them in an informal settlement; i.e. a slum. In the whole of Nairobi there is an estimated population of three million people. Kibera, the first slum I visited, have a population of up to one million people and is considered to be the highest populated slum in the whole of Africa (Internet 10).

These circumstances forced me to use an interpreter, a role that Mbatha filled. To work with an interpreter is always tricky and many anthropologists have experienced challenges when using them. I had not seen the need prior to entering the Kibera slum of hiring an interpreter and thus Mbatha quickly had to fill that role. Throughout the entity of the field work he remained so, when there was a need. Some of the problems that can arise is that for example, the interpreter belongs to a different societal class or status, have their own prejudices about the informants, have an agenda of their own, poor translation and belongs to a different sex than the informant in a situation that is hierarchical (Eriksen 2000: 28). One is highly dependent of the interpreter in the course of the field work, and thus he/she can determine a lot about what empirical material you gather. In the case of Mbatha I experience or sensed very few of these problems; he was well familiar with my questions and the points I wanted to make, he speaks good English, Swahili and Kikamba when that was more appropriate. He also works with community development and thus was very interested in the slum inhabitants and had been there before. Some of the concerns I had were however, that he

might have been somewhat biased in what kind of answers he believed I wanted, and sometimes discussions broke out in Swahili, seemingly to clarify the question.

Problems did, however arise at other occasions when Mbatha for some reason was accompanied by a third party. This was the case in the majority of the slum interviews and in the two couple's interview. One example was in Kibera, where our prominent guide took it upon him, even though I politely protested, too assist or take over Mbatha's role as an interpreter. At these occasions the discussions would go on for sometime and eventually I would get a quite short answer from the two, but which were quite similar. At the times when they were not consistent, I chose to trust Mbatha and ask the third person to elaborate what the informant meant. However, Mbatha was present at most times and he did more than often not protest and nor did the answers I got seem strange.

# Reflections on my role as a researcher

The relationship between whites and blacks is filled with prejudices in Nairobi and Kenya. The city is highly segregated and still coloured by its' colonial past. The majority of the white people who live in Nairobi are either, so called "white Kenyans" and are descendants of colonial Britons, or are employed by the UN or other aid-organisations and thus have a, in Kenvan perspective, a high salary. These people live in affluent areas, drive pricy cars and have guards and maids. Only a handful Kenyans live under similar circumstances. Most people in Nairobi live under harsh conditions, work 12 hours a day, 6 days a week to support their families in the city and relatives up-country. Many people also live in the slum areas in inhuman conditions without access to clean water, power, toilets and drainage. These are very poor people and unemployment is common. There is also a huge amount of white tourists that visit Kenya each year, and these people are often wealthy and go on expensive safaris and live in all-inclusive resorts. All this, and lack of education and above all, interaction between whites and blacks create prejudices. To be a mzungu (white or foreigner; originally "British" in Swahili) is associated with power, money and an opportunity to get better living standard, either in Kenya or abroad. Thus the interaction between whites and blacks is often filled with requests for things, funding and/or trips to Europe. This increases the tension and segregation between the groups, since many whites consider this to be straining and awkward.

Further on to be a woman complicated things but also opened up doors. It confused some people, since, in my experience, the view on women is far more traditional than the one we have in, e.g. Sweden. On one hand, men felt obliged to pay for me, on the other hand, they sometimes expected me to pay because of my skin colour and assumed financial status. From safety perspective I was always in a danger zone, since I was perceived to have a lot of assets but also as physically weaker because of my sex. The fact that I was white opened doors to me and gave me access to places where Kenyans would have been questioned. Being a woman, I think, made it easier for me to interview people since they saw me as less of a threat, both in the eyes of women and men, but my colour gave me respect, for good and bad. It was however, a deliberate choice to not offer any form of payment to my informants, because of these reasons, although small gifts to the informants could have eased that problem, in retrospect. Being a mzungu was the thing that most apparently affected my social life, daily routines and my study. Being white in Kenya is associated with so many things that it is impossible to not be confronted with these associations on a daily basis.

It was obvious to all people involved that I did not share the same background and experiences as most of my informants. To them I was, except a mzungu, also a Swedish researcher. It was sometimes unclear to the people I met, whom I was working for and what the research was for. Often I told people I had got a scholarship from my university but to a few people (mostly not informants) I made the mistake saying that my study was sponsored

by Sida<sup>4</sup>, an organization most Kenyans are familiar with. This was a mistake since these people assumed that I was working for Sida and they did not tell me what I wanted to hear but what they thought I should hear as a Sida-representative. This is a situation which is easy to end up in, as an anthropologist (Pripp 1999: 48f). How you are treated by other people and what information you get is often dependent on who your assigner is and whose interests people think, rightfully or not, you are representing. This can cause conflicts between the people involved in the study but it mostly causes trouble for the researcher to finish the study and actually get to hear what people really think or how a project is actually going can become close to impossible (Pripp 1999: 49). This experience I only hade once or twice and since my field was diverse the misunderstandings did not cause any long-term problems.

# Reasons for conducting a field study

What anthropologists have concluded is that the nature-culture dichotomy, like all ways to view nature, is socially constructed. The dichotomy has been used, also successfully at the time, but has been heavily criticised, as pointed out earlier in this text. Descola asks the question on whether we should assume that there is a universal way of perceiving the world or if it must be defined in the context of each culture (Descola 1996: 82ff). Personally, I do not believe in any universal perception of the environment or human-environmental relationship. However, I do agree that the perceptions have cultural features, a cultural pattern, even though the perceptions in detail must be individual. Further more, Descola poses the question if the cultural "patterns are represented as guidelines for action in the mind of the people we study, or are they merely a blueprint for our own ethnographic interpretations" (Descola 1996: 86), reminding us that we are all victims or slaves under our cultural filters. Descola also tends to agree that these patterns are cultural and contextually bind, but also that they are not solely a product of interpretations. Thus, ethnographical field work is justified in general, and my research in specific, as this is at the core of motivating the reasons for conducting this kind of research at all.



On a visit to a youth group in Kariobangi

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<sup>&</sup>lt;sup>4</sup> Swedish International Development Cooperation Agency

## Theoretical framework

In this section I will present the main theories that are relevant to this thesis and its conclusions:

- 1) The dualist perspective which is obvious to include as a reference point to increase the understanding of the nature/culture dichotomy.
- 2) Three paradigms of human-environmental relations are accounted for, as these are interesting to compare to the cultural pattern which will arise in the course of the presented empirical material further down. The paradigms are also interesting in relations to the modernity aspect which is central to the thesis.
- 3) A background and account for what modernity is and characterised by, is included here.
- 4) The last theory which I include is the one on the alleged relationship between poverty and environmental degradation. The reason I choose to include this is due to the underlying notion of this thesis; that perception and action are interconnected. Further, the empirical material is clearly permeated by the presence of poverty and there is thus an emphasis on the environmental perception of Nairobi poor. The critique of the alleged connections between poverty and environmental degradation becomes increasingly relevant in the analysis of the NEMA (2004) report, which will be accounted for in the next chapter. This theory is also a dichotomising in the sense that it creates a binary relationship between poor people and their environment, something which I hope to prove to be false in the course of this thesis.

## **Dualisms and dichotomies**

The dualist phenomenon is deeply rooted in anthropology and in scientific reasoning and non-professional thinking in some societies. The rationality era of the enlightenment and the Christian anti-archaic notion together made nature mechanic and soulless (Worster 1996: 51f). This is also known as an imperialistic notion, since it clearly pushed for man's dominance and exploitation over nature (Ibid: 53, 61ff). The new mechanistic world view of order and control was soon criticised by Linnaean scientists who were scared that it would remove God from nature. However, the way western science viewed the environment was altered for a long time period, admitting both a limit and stimuli to the exploitation of nature (Ibid: 76, Pálsson 1996: 65f).

That the discussions about humanity and nature are central in the anthropological subject and have been so for quite some time is evident (Watson & Watson 1969). These authors attempt to define the concepts to "enable us to begin a meaningful contrast between man and nature" (Watson & Watson 1969: 17), thus taking a stand that a contrast is needed to analyse the relationship between the two. That the authors also are of the opinion that a contrast needs to be established between culture and nature is obvious since they are of the opinion that culture is something produced by human beings and utterly separated from nature. To define what culture is, is one of the key debates in anthropology and definitions are probably as many as there are anthropologists or even human beings (Eriksen 2000: 14f). Therefore, this very short but confident definition seems a bit negligent of this discussion and the nuances of the term.

I think the reason dichotomies have reached such popularity is the fact that the formation of identity is built up on the theory of categorising people in us and them. "It is through contact with others, that you discover who you are yourself", Eriksen (2000: 284) writes. According to Herbert Mead (in Johansson 1999:78) identity is created in the relationship or encounter with 'the other', so that one can see oneself through someone else's eyes. According to Johansson (1999: 78f) this way of viewing the creation of an identity is itself intimately connected to modernity and its dualistic approach to the world.

# Dichotomies in science and practice

Some claim that dichotomies are at the heart and base of scientific structure and thinking. while others use them restrictively and others yet wish to abolish them completely from scientific thinking (Miegel & Schoug 1998: 7f). The number of dichotomies present in everyday life is unaccountable for. Dichotomies are first and foremost a product and important part of scientific epistemology or scientific theory, but have tried to approach humanistic and social sciences, Miegel and Schoug (Ibid: 8f) claim. The scientific ideal has now, however, been accompanied by a parallel humanistic or hermeneutic view, which has been struggling to gain the same prestige as the naturalistic science. The use of dichotomies in humanistic disciplines has been an attempt to enjoy the same status as the naturalistic science, claim Miegel and Schoug (Ibid: 9). This is now object to change, as methodological aspects of social and humanistic sciences are becoming increasingly important. These disciplines are now being more and more accepted in the discourse of epistemology. In this process of change, the type of research I have been engaged in, that is subjective dimensions such as perceptions and feelings, become increasingly accepted in the scientific debate (Ibid: 12f). However, concepts of dualism are still present, even in the modern society that Sweden represents, claim the authors (Ibid: 13), e.g. in categorisations such as 'us' and 'them'.

The core of what a dichotomy is "a conceptual division of a category in to two pieces" (Miegel & Schoug 1998: 14, *my translation*). It is thus a way to organise the mind into thinking in binary relationships. In the scientific tradition the two subcategories of that binary are often antagonised and act in forms of rivals, both in society, in religion and from different epistemological perspectives. Miegel and Schoug describe that dichotomies can be seen as of use to create order in the chaos that permeate our human existence. One example where dichotomies have been of great importance is in the structuralism approach of Claude Lévi-Strauss, but also in various cultural analysis made by ethnologists such as Orvar Löfgren (Ibid: 15).

As we approach the theme of this thesis, the use of dichotomies has also been increasingly criticised by poststructuralists and others. These are of the opinion that these binary models are used to make one side dominant on behalf of the other. According to Derrida (Miegel & Schoug 1998: 16) this is a characteristic of western reasoning at large, where one of the binary opposites is marginalised, and the ethical aspect is good against evil, and the marginalised side is represented by the latter (Ibid.). Also debt and credit are part of a dichotomised world, and in line with Giddens (1990, Hornborg 2001: 136f) dichotomies and money, are phenomena of modernity.

Although it becomes clearer that the specific dichotomy which separates culture and nature is innate in modernity, that does not mean that dichotomies per se are strictly modern. As mentioned in the introductory chapter, Descola and Pálsson (1996: 9f) point out that merely because there are no exact correspondent to a western model, that does not conclude that no similar model exists in non-western contexts. However, it does mean that they can be or even are different. From my experiences in Kenya I observed many binary models which were quite dominant, following the described pattern of how these models are used. For instance, the division of the sexes was very conspicuous; different rules and attributes applied to men and women. Other dichotomies also were present as cultural patterns and individually. Although, the question that guides this thesis is to see how relevant the modern nature/culture dichotomy is to Nairobi citizens, this thesis does not deny that there are divisions made between nature and culture present in Nairobi or Kenya. How these are made and if it the modernity dichotomy is the one being used, we will find out in the account for the empirical material.

# Dualisms and ecological knowledge

That indigenous people have an understanding beyond the one of western biologists have, according to Kempton (2001: 59f), been well known and for a long time due to extensive research. These field studies have focused on indigenous groups; people that have lived in the same way in the same area for centuries. One could question the definition of indigenous people that the author makes here since it is also well known that very few societies and cultures are uninfluenced by and has had connections with the greater world system of trade and relations in one way or the other. The point is that regardless of outside influence, staying in one environment type for some time requires a certain adaptiveness and knowledge. Kempton (Ibid: 57) points out that it should not be seen in the light of the "ecologically correct savage' stereotype" (Ibid.) but in the sense that it is interesting to learn more about sustainable management, and some of these groups can provide an example of such.

However, human kind is known for their quick adaptive skills, and would not survive for long in new environments otherwise. The people of the slums in Nairobi live in very harsh environments, and it is my firm belief that one has to learn the ecological and social prerequisites of that environment quickly to be able to survive there (Knox & Marston 2003: 490f). The anthropological studies that have been done have asked the question on what cultural models determine and connect human-environmental relations. It is these cultural models that I am trying to find also here in the Nairobi environments. "Mayan ecological knowledge 'is not only crucial to Maya reasoning about the natural world but is also to behaviour with respect to the biological environment" (Atran & Medin 1997 in Kempton 2001: 61), is a statement which confirms that perception guides behaviour and that knowledge of your environment shapes your perception. In extension, knowledge in all forms is cultural and here is the web that connects culture, perception and action, putting perception at the centre of attention. Hornborg (2001: 50) is of the same opinion when he states that applying universal perspectives are somewhat pointless when one can establish that the world, and the environment, is culturally constructed.

However, one should not jump to too quick assumptions, debates on the subject do exist and e.g. the anthropologist Tim Ingold does not agree totally that environmental perception is not universal. Ingold (2000: 15ff) warns us to again make use of a dualist perspective on the difference in perception between cultures. However, he himself makes the division; western thought and indigenous world view. I believe Ingold has a point in his warning, but in this particular case I also think he is guilty of co-cementing the dichotomy when he makes that distinction. One of the prerequisites of this thesis and the field work that preceded it was the idea that there are other groups, in between the extremes, so to speak. The inhabitants of Nairobi are an example of such. Thus it is meaningless to criticise the theory that perception is more culturally determined than universal, even if there must be similarities in the perceptions across the world, and to criticise the dichotomy, if one makes use of a dichotomy in that very critique. Also within a community there may be cultural variations, as well as environments, creating inner differences between the inhabitants which also could be individual, especially in a field as large and diverse as Nairobi. Generally speaking, in anthropology one is warned to use universal standards, Eriksen (2000: 21).

# Three paradigms on human-environmental relations

Are we to replace the historically relative nature-culture dualist category with the more general distinction between the wild and the socialised? (Pálsson & Descola 1996:1f)

The quote above is at the centre of much anthropological contemporary discussion and also of this thesis. As the authors (Pálsson & Descola 1996) point out, the western notion of

nature/culture dualism has been central in anthropology for half a century and has both been embraced and criticised. The dichotomy has been used as an analytical tool, as an excuse for bickering and has been taken for granted until an interest in whether non-western societies and cultures categorise the world differently and if that is the case – how, arose. The table has turned and now many anthropologists criticise the dualist approach, but that does not mean it has been totally abandoned. Many still think it is relevant as an analytical tool and yet others see it as a universal law. Descola and Pálsson hold this fact as remarkable considering that this binary opposition is closely connected to other typically western such; mind-body, individual-society and so on. The new perspective on both people and nature as subjects and not objects "/.../ suggests a radical break with the Cartesian tradition. /.../ no longer the passive autonomous individual but the whole person acting within a particular context." (Pálsson & Descola 1996: 6). Many anthropologists have done field work, themselves discovering the meaninglessness of the dichotomy (Ibid: 6f). The discussion on the subject of the dichotomy's relevance has also picked up pace and new paradigms or ways to interpret human-environmental relations have evolved.

# Domination and stewardship

There are three main paradigms, according to Pálsson (1996: 64ff) in the field of human-environmental relations and their moral frames. These are as follows:

- The first one is one of dominance and exploitation, where humans master nature and there is a clear break between human and nature; <u>orientalism.</u>
- Number two is also dominant, but humans are here the shepherds or care-takers of nature; paternalism.
- In third comes, the view that human beings are part of nature, that we are all indivisible and at one with the environment; communalism.

The two first paradigms both, to different extents, embrace the modern dichotomy of nature/culture but interpret the break between nature and humans in very different manners (Pálsson 1996: 66f).

The orientalism approach is very much connected to the nature/culture dichotomy, it is one which embraces the break between nature and culture and is a colonial way of viewing the environment. Humans are the masters and the environment a place for human actions and alterations. According to Pálsson (1996: 67f) the vocabulary of orientalism is quite distinct and contains words such as; purpose of production, management, technical, rationalism and exploitation. Early ethnography and anthropology were also subject to this human-nature perception, not a coincidence as anthropology came in the wave of colonialism. The second paradigm shares features with orientalism but also differs in important aspects. Paternalism is guided by protection and not exploitation, Pálsson (1996: 69) claims. Humans have a responsibility to take care of nature, thus separating it from the human world. There is a tendency to objectify nature and to make distinctions between different human beings based on their alleged relationship to nature. Indigenous people and non-modern societies are considered to be closer to nature and are thus up-raised in contrast to the people of Euro-American cultures who are considered to unfortunately have moved beyond nature, according to Pálsson (Ibid: 71). Peasants tend to define human-environmental relations in a paternalistic manner. What should also be noted is that people of the paternalistic paradigm are aware of ecological problems and seek to reach some sort of balance with the environment to avoid these.

Pálsson's (1996: 72f) third paradigm; communalism, differs to the two prior ones. This is a notion that takes a stand against dualism and the separation of nature and humans. The paradigm is characterised by that;

The proper unit of analysis is no longer the autonomous individual separated from the social world by the surface of the body, but rather the whole person in action, acting within the contexts of that activity. (Pálsson 1996: 73)

This way of viewing human-environmental relations also means acknowledging the importance of communication and balance. Communalism is also closely tied to viewing the land as an extension of oneself; an embodiment of nature, and vice versa. Pálsson (1996: 76) would like to describe communalism as a, for the future, hopeful paradigm.

# The dynamics of modernity

To understand the dynamics of modernity is important to understand its discontinuities or differences in relations to traditional societies. To understand the dynamics of modernity is important to understand its discontinuities or differences in relations to traditional societies. When using the term modernity, Giddens (1996: 13) mean the types of social life and organisation of society that occurred in Europe from the 17<sup>th</sup> century and onwards. Later modernity has influenced virtually all parts of the environment. What have been the primary changes lie in extensionality and intensionality of those changes. All types of societies which have not fully embraced the modernistic lifestyle are pre-modern or traditional, according to Giddens (Ibid: 13-17). Giddens uses this term, I believe, to emphasise that he claims that the drastic discontinuity is between what was prior to the emerging of modernity, rather than that human history is permeated by discontinuities as many followers of the evolutionary perspective would like to think. I would prefer the term non-modern but find it interesting that Giddens not does so, assuming that he acts in the dichotomised modernity spirit in doing so.

According to Giddens (1990: 25) modernity dynamics is a result of some three prerequisites;

- The separation of time and space,
- The process of disembedding and
- The reflexive arranging and rearranging of social relationships in a constant flow of knowledge affecting individual and group behaviours.

In traditional time, e.g. in agrarian societies, time was intimately associated with space. For instance seasons of the year were associated with events such as harvest and these varied geographically. The time to do something was connected to the place in which it was done (Giddens 1990: 26f). In the section on people in the industrial society further down, an elaboration of this line of reasoning can be found. In modernity, time has been standardised emptying time, as Giddens (1990: 27) expresses it. The coordination of time is also connected to control over space, meaning that in modern time space is something which can be referred to without being in the context of time. As the world grew smaller and connections grew wider, over the globe, so did space become less connected with time, as a place now could be influenced by another place and a different time to a much bigger extent. Like the continuities in history, this process is not linear and not without drawbacks, Giddens (Ibid: 28) says, but time and space is sometimes reunited in modernity, as in train timetables and such. This timetable is however, also a symbol of modernity since it is a simple mean to coordinate a complex chain of trains, transports and people over wide distances and for a longer period of time.

The time and space separation is important to be able to understand the disembedding processes that characterise modernity. It enables institutions to be lifted out of their context, creating a segregated system of people and standardisation possibilities. This crosscuts over social dimensions in society in a way that would have been impossible in agrarian times, Giddens (1990: 28) claim. These institutions also have the power to influence enormous amounts of people who can be widely separated geographically. This bureaucracy enables

connections between the local and the global societies in the world. Finally, the standardization of time and space has made it possible to create common history, uniting time and space in a historical and global perspective, which now is the hegemonic perspective of the world, its people, places and history in a linear manner.

# Comparing the pre-modern with the modern

In an attempt to conceptualise the modern and the pre-modern, Giddens (1990: 99) follows his own modernity pattern and makes some very clear distinctions between the two. These are the main points;

- 1) Pre-modern kinship ties versus modern personal relation
- 2) The pre-modern local society versus the modern abstract systems that maintain relationships regardless of time and space
- 3) Religious cosmologies of the pre-modern versus the future-oriented modernity. On the fourth point the pre-modern society has characteristics which, according to Giddens, hold no contra point in modernity; traditions as way to tie together the past, present and future. To make the clear cut between pre-modern and modern is Giddens choice as I would prefer the term non-modern to pre-modern. There is an innate dualism in this way of thinking and conceptualising, which is very much in line with the modern way of doing things, in Giddens own definition of it. Whether the distinctions are correct it is difficult to say but he has some clear points about the nature of modernity. The question is really where Nairobi fits in his outline and if there could and maybe should be something in between.

## People in the industrial society

The relationship between nature, culture and environment has been described by the ethnologist Orvar Löfgren (Frykman & Löfgren 1979: 21) in terms of the change of time. Time is something which all human beings have a relationship to and are dependent on but in diverse ways as well as we perceive it and ascribe different values to it. These differences are not only between cultures in space, but also in time. This correlates to the distinctions in time and space that Giddens (1990) claims are innate in the modern society. Löfgren (1979: 22f) is more interested in the cultural differences in time and claims that the time perception in Swedish agrarian times was cyclic and determined by the chores of the farmers in his daily life and the events of the year connected to his work. The phenomenon of changing time perception in modern times in contrast to agrarian time, Löfgren describes as a transition between cyclic time perceptions to linear. This can be compared to what Giddens (1990) calls the standardisation of time leading to a separation of time and space, which did not exist in agrarian times according to both Giddens and Löfgren. As Giddens (1990) describes this change between cyclic and linear time perception does not happen over night but is an ongoing process, such as in the Swedish agrarian society from the 18<sup>th</sup> century when a more capitalistic production makes an entry (Frykman & Löfgren 1979: 27f). Löfgren (Ibid: 43) characterises the modern approach to time as neurotic and claims that time has taken charge over the people.

In a Swedish context, the love for nature is something which is deeply associated with our culture and character, something that I as a Swede can agree with Löfgren (Frykman & Löfgren 1979: 45f) on. This is not to say that we actually love nature more than others but we, in generalised terms, consider ourselves to be great nature lovers. This is a stereotype, which I believe, is not only upheld by foreigners' view on Swedes, but also by ourselves. As Löfgren (Ibid.) points out this affection is connected to the development of the modern Sweden and the bourgeois or middle-class that I prefer to call them. To some extent it is also true that Swedes are very fond of spending time outdoors; many Swedes own their own leisure houses in the country side and many more spend their leisure time fishing as recreation. As Löfgren

(Ibid: 45f) points out, this is, however, more about the landscape within our cultural filters and minds than the opposite. Here, the subjective and culture creating image of the landscape of the environment makes its entrance.

As we can see the break between the agrarian and the modern times can be rough and also alter perceptions and thus human-environmental relations. It is still difficult to conclude if any similarities are to be found between this Swedish example and the case of the Nairobi informants. As we go along in the thesis I will return to this subject to bring some clarity into it.

# Poverty and the environment

Another binary model is the common view which blames poor and rural living people of destroying their environment for short term gains. Economist Marian Radetzki (2001: 22f) describes the most common reasons for destruction of the environment by humans as; 1) when the negative consequences of their behaviour does not affect themselves, 2) an estimated calculation if the benefits of the harmful actions in relation to the drawbacks, and 3) unawareness that the behaviour will lead to environmental destruction. In conclusion, people damage their environment because they have something to gain from it and/or are ignorant of the consequences. Radetzki continues to argue that, economical wealth is the key to solving these problems. Because of lack of space I will not meet all Radetzki's argument on why rich nations' environments are much better than poor nations' (Ibid: 35ff), but simply establish that he clearly blames poverty for environmental destruction.

There is a known way to establish the alleged correlation between increasing wealth and an improvement of the environment; the Kuznets curve of environment (Långtidsutredningen 1999/2000: 122, Opschoor 2003: 497). This curve describes how a low income correlates to environmentally harmful emissions, which increases until a certain point where the emissions start to decrease; that is when the income reaches a certain level per capita. However, there are also many critics to the use of this curve, where I think that the fact that it does not consider the reasonability of putting so much responsibility of environmental emissions on poor nations should be one of the main points of critique. The well known problem of the US' and Europe's extensive carbon emissions are not addressed by the curve either, nor are the proportion of these in comparison to the developing countries. To add further critique, the curve tells us to ignore problems of distribution, which have actually been proved to increase by the UNDP, as global wealth does the same, severely damaging the liability of the curve, according to Opschoor (2003: 496f). As the processes behind these problems on a global basis are enough material for another thesis, I will thus contradict the Kuznets curve paradigm and economist Radetzki, only in the context of Nairobi.

# Having the time and money to care

Radetzki (Ibid: 43ff) argues that humans, as all living organisms, alter their environment to make it suit their particular needs and thus e.g. cities, swimming pools and agriculture have been created. Further he claims that with an increase in economy and standard of living, the interest of the environment increases. Simply put, people now have the time and money to care about something as trivial as the environment, which has been put aside in strive for wealth. A good environment all of a sudden becomes important when wealth is achieved as one would like to use it for e.g. recreational purposes (Ibid: 61ff).

The process that Radetzki describes could be considered true in one way. The latter part of it, that interest in the environment increases with wealth, could be compared to what happened when industrial Sweden evolved, which is described by Löfgren & Frykman (1979) above. Very briefly put, the middle-class that arose in Sweden during the 19<sup>th</sup> century was quite wealthy and became worshippers of nature. However, the prior human-environmental

relations were characterised by the mystified environment of the agrarian Swedes and was generally not environmentally destructive. When the middle-class got to define the human-environmental relations in the rise of industrialism and modernity, environment became nature and thus separated from human (Frykman & Löfgren 1979: 21-73). I thus argue that the Radetzki way of reasoning is strongly influenced by a reverence and influence by the modernist paradigm and the nature/culture dichotomy. The reason why this is interesting for this thesis is the basic notion that there is a clear relationship between how people perceive the environment and how they act towards and in it. Perceptions may of course vary with income, but I hope to show that there are more the perception of and action towards the environment among the poor of Nairobi then simply a cause-and-effect relationship between their income level and their degraded environment. More discussions on the environment and poverty relations will follow further down.

# The official version

To create a better understanding of what role environmental issues play in the public sphere in Kenya it is necessary to know the position of these in public administration. The National Environment Management Authority in Kenya (NEMA) produces a State of the Environment Report (2003, published 2004) with a few years interval. In this chapter I will address some of the 2003 year report's main points and briefly go through their view on environmental problems and how they are being dealt with.

# The Kenyan environmental problems

NEMA has chosen to divide the environmental problems into different categories or themes under which they address the diverse and extensive environmental problems that Kenya as a country faces. NEMA (2004) gives a contextual background to Kenya, not only their physical and geological environment, but also to governance, finances and international relations. The report is based on the Rio-conference of 1992 and the Agenda 21 outcome which may clearly be seen in it's table of contents (Ibid: 1). The thought behind the notion of sustainable development and Agenda 21 is to include different aspects of human life, both the so called natural environment as well as economy, culture and trade for instance as defined in the key terms chapter above (The Brundtland Report 1987, NEMA 2004: 1). The NEMA report was made to: "create public awareness on environment /.../ identified societal pressure, and their impacts." (NEMA 2004: 1). This statement serves to further emphasize the importance of addressing different aspects of environment.

The report's background on Kenya deals with physical features, the social and economic status of the people and country. It further includes an introduction to the Kenyan political system, an account of the most important environmental resources and a brief account of the country's international stand on environmental issues (NEMA 2004: 4-6). In my brief account for the different chapters of the NEMA report I will not go into detail of all the aspects that NEMA has chosen to address. What I will bring up are some aspects that I consider to be dominant or of extra importance to both understand the discourse of environment by the Kenyan government, and which bring attention to some aspects that are relevant to the reasoning of this thesis.

# Division of environmental problems

NEMA (2004: 7) gives an account of a number of issues which they consider to be of importance to understanding and solving some of the environmental problems in Kenya. The migratory aspect is interesting, as many, according to NEMA, move to urban areas because they are perceived as a possibility for people to create better livelihood opportunities.

The population distribution is still of the kind where about seventy per cent of all Kenyan citizens live in rural areas. However, the distribution between different areas is uneven and NEMA (2004:8) expresses a fear that the carrying capacity of some areas is being exceeded. It is clear that some provinces, mainly where the three biggest cities (Nairobi, Mombasa and Kisumu) are located, are very densely populated. Nairobi stands out as the largest city with over two million inhabitants in 1999 and also the highest number of immigrants for a number of decades (Ibid: 8f).

In the cities the problems are immense, as the slums are on the increase and there is lack of sanitation, housing, education, work opportunities, health facilities and infrastructure (NEMA 2004: 12). This is due to that the Kenyan planning for human settlement has not kept pace with reality, which NEMA themselves acknowledges. Otherwise, NEMA (Ibid: 13f) claims, the number of informal settlements would be minimal or at least not have problems to the present extent. NEMA admits that the three largest cities in Kenya lack proper plans for

human settlements. The informal settlements are called "unsustainable with urban decay resulting in environmental crisis" (NEMA 2004: 14). The cause for this lack of planning, NEMA blames on resource shortages, the fact that inadequate stakeholders keep interfering and that mechanisms for implementation have failed. Also the legacy of colonial times are brought up as a reason for the bad planning, as the cities are built on western models and do not include the problem of informal settlements. This has consequences both for people in the urban and rural areas as well as sensitive environments and habitats in both respectively, according to NEMA (Ibid.). The aim is now to balance socio-economic goals with environmental concerns to create sustainable human settlements, in accordance to the sessional paper on Environment and Development from 1999. In agreement with the implementation programme, The Environmental Management and Coordination Act's (EMCA), also from 1999, environmental impact assessments must be conducted for all implementations plans and programmes to promote sustainable development in this problematic area (Ibid: 15).

The problems of housing and slums in rural and urban areas respectively strike hard both against the people and the affected environment. In the cities, NEMA claims to lay extra emphasis on upgrading the slums; how this is to be done is unclear. Problems include lack of water, energy, sewerage systems, and infrastructure and are mostly due to rapid urbanisation and a government inability to keep up with it (NEMA 2004: 19f). What is clear is that the plans that already exist to deal with the urban environmental problems are misguided and highly inefficient.

The mere fact that the slums exist and have been able to grow to such an extent appears to be due to the urbanisation rate; an innate phenomenon of modernity (Soja 1954: 48). The problem seems to lie in that modernity solutions are being used to contradict a modernity problem. Kenya and Nairobi have legacies from colonial time which probably have not benefited their possibility to determine their own development process. Spatiality changed with colonialism and the foundation to the modern problems of today were founded through the founding of large cities like Nairobi, which served as a colonial management centre, as well as the introduction of a cash economy (Soja 1954: 1-4, 56). Today the notion of sustainable development is a typical modern feature and it is also the primary plan which NEMA intends to use to solve the problems of modernity (NEMA 2004: 15).

## **Poverty**

Poverty is a problem very much interrelated to the ones of urbanisation and slums as its presence there is unmistakable. The main reasons for poverty, according to NEMA (2004: 25f), are;

- low agricultural productivity,
- declining economic growth,
- inequalities and gender imbalance,
- land tenure systems,
- high cost of education and essential services,
- corruption, and unemployment
- HIV/Aids, and vulnerability
- insecurity and ethnic tensions

NEMA further blames the fact that so many are vulnerable to environmental events such as floods and droughts on poor governance of natural resources. That "The relationship between poverty, environmental degradation and population is complex", NEMA (2004: 26) acknowledges as well as that many of the environmental problems the poor face are not created by themselves but of others. Here they admit to that it is the public system which is responsible for environmental degradation and not the poor people of Kenya. This can be

connected to the poverty trap of alleged cause and effect relationships between the poor people and a degraded environment that was referred to in the theoretical chapter above. However, NEMA also draws the conclusion that poverty leads to poor sustainable management and an overuse of resources in the gain of short term needs. In making this last statement NEMA again decline full responsibility for the poverty and environmental problems in blaming the poor for degrading their environment for short term gains, such as survival. It would be interesting to have NEMA contemplate further on why these people are poor and why they are not able to take care of their environment. As it is now they contradict themselves both admitting that improper public acts and implementation are responsible for the case of the poor, as well as stating that it is a problem caused by the poor. This example can perhaps be seen as an unequal distribution of modernity among the Kenyans (Soja 1954: 23) In the case of people in the Nairobi slums, I will return further to this subject in the themes of the next chapter.

One of the actions NEMA wishes to take is to raise awareness of the connections between environmental problems, population planning and development. I am sure the sentences:

The imbalance between population and environment can be dealt with using a dual approach of a population dimension coupled with one that deals with environment and developmental issues. More effort will be put to ensure effective implementation of monitoring and evaluation of projects and their sustainability. (NEMA 2004: 29),

are written with the best of intentions, but are unfortunately remarkably similar to what Hornborg calls "sustainababble" (Hornborg 2001: 26). This quote clearly points towards a dualist solution where population and environmental issues are to be dealt with separately. It fits into the sustainable development thinking, but the question is if it is right for Nairobi.

Among actions which NEMA plans to take are;

- reduction of deforestation,
- improvement of access to fresh water, '
- improvement of living conditions in urban areas and,
- conservation and sustainable management of rich biodiversity (NEMA 2004: 29).

These are all good points to make and to work on, but they are also very general in their nature. When NEMA states that an action will be to improve the living conditions in the urban areas, they fail to explain exactly how this will be done. I suggest that it is a policy and actions outline which has good intent but no proper plan or means to implement it successfully.

# Health, pollution and waste management

Salinisation, the use of fertilisers, deforestation and erosion are some of the contributors to the worsening of water resources in Kenya (NEMA 2004: 55f, 99). An estimated fourteen per cent of Kenya's total water resources are ground water, which is mainly accessed from boreholes or wells along the coastlines. In areas such as Nairobi, the ground water is subject to conservation, meaning that there is a scarcity of water and it thus has to be permitted by license to extract it. The supply of safe drinking water is on a national level, according to NEMA, about forty per cent, which is a very low figure. Thus, to many people rainwater is an important source of fresh water. However, there have been many droughts during the last few years and causing scarcity of fresh rainwater, which has also led to crop failures (Internet 11).

Other water resources in Kenya are subject to heavy pollution not least from health hazards such as pesticides. Also a lack of sewage treatment and solid waste pollute the water. Herein this instance urbanisation is pointed out as a major source of pollution (NEMA 2004: 57ff). However, some of the heavy industries are also responsible for the water pollution. As

NEMA points out, the polluted water has a very strong impact on people in general. NEMA further believes that the new EMCA (see above) implementations should help improve the work of the now responsible government bodies in this issue. In the slums fresh, clean water is not freely available, but is kept and sold in water tanks. This is yet again a failed public policy where the market has stepped in where the poor are dependent on the state providing services. The market is money and profit. As it rules the lives of Nairobi slum inhabitants, they suffer as they have little or no means to pay for these services. Exactly what the EMCA act is supposed to do for these people NEMA does not clearly state. They however suggest that these problems do partly derive from bad policies and inadequate investments (NEMA 2004: 58f).

The next big problem which is mentioned in the report (NEMA 2004: 86ff) are the pollution and waste from the country's various industries, including chemicals and hazardous production which produces ditto waste that is responsible for polluting water and air. What should be done about the problems on energy, pollution and waste management seems to be extensive (Ibid: 103) and are mostly compiled of different suggestions to improve existing legislation and enhance existing ways of dealing on a practical level with the problems.

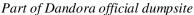
In the meantime, the environment and human beings suffer greatly from the pollution of the present water resources, and from floods and droughts, which are frequent in Kenya (NEMA 2004: 65ff). There are many waterborne-, vector- and respiratory diseases that affect and threaten the life of many Kenyans on a daily basis, where the former are mostly connected to polluted water.

Environmental health is also subject to NEMA's concern and solid wastes are pointed out as a major problem. In urban areas there is a huge problem with the disposal of human wastes where open dumpsites are illegal but common and in affect very badly managed. One important aspect, reportedly on the increase, is the widespread use of polythene bags; a product which is impossible to recycle and which causes a number of problems including frequent littering (NEMA 2004: 68f, UNEP 2005: 23). In my own experience they are one of the biggest challenges in the solid waste management in Nairobi, and in my visit to the only official Nairobi dumpsite - Dandora, as well as in the Kibera slum, these polythene bags were piled up and flying around, impossible to dispose of in a productive way. Within the EMCA act there is new legislation enacted and discussions with private actors are ongoing as a part of solving the problems of solid waste management at the implementation level, NEMA (2004: 69f) states. Private actors are already dominating the solid waste collection industry and the NCC's choice to make use of these seems to be one of the reasons behind images like the ones below. Nairobi River would not be as polluted as it is if NEMA and NCC worked out a way to collect the wastes produced in the slums without charge. Of course there are other challenges that then must be solved, like the absence of an infrastructure, but the situation calls for the public state to take responsibility and command of the utterly failed waste management in Nairobi.

As I would experience not only in Kibera, but also both in the eastern side of Nairobi as well as in the central business district (CBD), is the problem with access to sanitation facilities. NEMA (2004: 69f) estimates that of the urban population sixty nine per cent has access to some kind of sanitation facilities, but these are often very poor. They also bring up the phenomenon of flying toilets, a consequence of that slum inhabitants often must pay to use public and private toilets. The term is an expression to illustrate that faeces placed in one of the above-mentioned polythene bags at night and, in the cover of the dark, are thrown out into the street or surroundings. That this is a very common phenomenon was very much apparent on visiting the slums of Nairobi, and it was often joked about, both by the people in the slums themselves and outside.

Also in this area NEMA has a number of suggestions of actions that need to be taken to come to terms with the environmental and human health problems. These include to comply current laws to be followed, an improvement in flood and drought preparations, provide clean and safe water for all, the development of a malaria vaccine, and promote reduction and recycling of solid waste (NEMA 2004: 75). As before, these are all very good but a step-by-step implementation plan is missing as these actions are all very general.







Nairobi River, Kibera slum

# Governance, information and cross-cutting issues

In the final chapter of the NEMA report (2004) environmental governance and its related problems and solutions are addressed. Here is an account for the process of bringing in international conventions into legislation in Kenya, from the Stockholm conference in 1972 to post Rio-conference Agenda 21 implementation. The EMCA act, the latest big legislation reform, receives the largest amount of attention, and was also frequently mentioned in my interview with a NEMA official (Informant 13, NEMA 2004: 123f). An extended reorganisation of institutions and NEMA took place in 1999 to improve the implementation of EMCA and its' acts. EMCA should be seen as a compliment to existing laws, not a substitute to them. A number of environmental conventions have been signed by Kenya, some ratified, like the Convention on Biological Diversity from Rio 1992, while others not, like the Kyoto Protocol, but where Kenya is subject to the Clean Development Mechanism. On a general basis, NEMA and its implementation plan EMCA is the umbrella which is assigned to deal with all of the above mentioned problems and many more (NEMA 2004: 124ff). It becomes increasingly apparent that Kenya, for different reasons, wishes, or is obliged to participate in the international official modernity discourse on environmental issues.

One of the gateways to solving the problems is to work with raising public awareness and educate both formally and informally about environmental problems. NEMA (2004: 135f) points out that environmental education (the EE strategy) has gradually been incorporated with school curriculum. There is however a funding problem which EMCA tries to solve by providing funds for projects and environmental management that seems to fit the right purposes. They are also aware that "Undermining the value of the environment is thus an avenue towards economic decline as has been experienced in the last two decades." (NEMA 2004: 139). The international debt that Kenya suffers from also holds them back, NEMA

says. Thus the problem of poverty is difficult to solve, as environmental issues have to stand back for dept repayments (Ibid.).

The main actions that NEMA and the Kenyan government generally are planning are within the frames of sustainable development. This has been done through the use of "appropriate policies and programmes" (NEMA 2004: 12) and the goal is to integrate conservation into activities aimed at economic development. In my mind this unfortunately does not say too much about what specific and concrete plans NEMA has for solving the problems that they themselves acknowledge.

Here NEMA acknowledges the increased importance of environmental issues in the international community and emphasizes the global responsibility that should be shared among the world's states (Ibid.). The capital is now expected to have around three million inhabitants, but the numbers are uncertain due to the big number of immigrants and people living in so called informal settlements. These informal settlements are what they are named; informal. That means that these are residential areas which officially do not exist. They are, however, difficult to ignore as they are on a constant increase and thus NEMA are obliged to have slum-upgrading programmes (NEMA 2004: 12-17). What these consist of remains unclear and my belief is that as long as the slums are not recognised as official residential areas it will be all too easy for the public authorities to ignore its environment and people.

# **Analysis of the NEMA-report**

I find it interesting that the Kenyan authority brings up these particular issues, accounted for earlier, in relations to what my informants point out, as can be read about in the next chapter. What I sense is that there is both an understanding and a misunderstanding between the Kenyan people and their government. The official take is the one of sustainable development, a notion which I consider to be a divider, rather than a collector of different aspects of human life. In sustainable development one aspect is exchangeable for another, e.g. the environmental aspect can be set aside if all the goals on the other aspects have been reached. This does not acknowledge the importance of the environment as the basis for our concern in dealing with many different types of issues (Opschoor 2003: 497ff). When my informants answered question 1.a. on how they define the environment many societal aspects were brought up since the physical surroundings of many people are not only so called natural environment but also other people. No one, however, claimed that as long as all other aspects of their lives were solved, that would without exception mean that the environment could be forgotten about (c.f. theme 1, next chapter). This I think is due to two things; one is that the environmental problems have gone so far and are so apparent in Nairobi that most people understand, e.g. for the sake of their health, that dealing with these are essential. The other reason is that the environment is not thought of as only the physical environment, or what we (e.g. in Sweden) know as nature, but also all other aspects, and this causes these to be inseparable with the environment as a natural-given core.

It seems to me as if NEMA are concerned about many of the environmental problems that are occurring in Kenya and also show some will to work on solving them. The key issues are how, at which price and to what extent. It is indicated that the main path they have chosen, is not surprisingly, is the internationally accepted sustainable development and Agenda 21 (NEMA 2004: 123ff). Since Kenya is a developing country, my assumption is that the pressure from the international community on them to work on environmental aspects is generally not that high, since the country's economic growth is most likely prioritised. Further on, the current domestic legislation is apparently not enough since there is a concern from NEMA (2004: 132-149) on this matter. Further, the realities of the environments that make up Nairobi today provide little possibility for healthy living for the city's poor, as most of them are severely degraded.

There are also numerous stakeholders, e.g. private companies, with different agendas and interests in solving the environmental issues, who are willing to fight to keep out stronger legislation and/or an implementation of these in favour of other concerns (NEMA 2004: 136f). The conclusion I can draw is that NEMA have good intentions but no concrete, proper plan on how to solve these very complicated matters, as shown in several examples above. What I know is that they must be solved in one way or the other, and my guess is that an extra effort and some thinking out of the box will prove necessary. The current legislation and modernistic thinking has proven to not be enough. Thus, to put all hope to the sustainable development path is understandable in the context, but still an easy but risky path. From the suggestions for improved legislation and implementation made by NEMA throughout the report, and as shown above, I can only conclude that the sustainable development notion does not work to impose proper and detailed policy plans in the case of Nairobi. Using that path is of course better than to pay no attention at all to the problems, but since no actual step-by-step plans are presented there seems to be a gap between public authority and the people and environments concerned.

A new type of thinking and effort-making could consist of NEMA demanding more help on environmental issues from the international community and actually integrating the people who are involved and affected by these problems. The environmental problems also affect people, both in the countryside and in the city, directly or by consequential chain. To have the assumption (Informant 13) that the stakeholders in the slums are not interested or bright enough to comprehend the problems and their extent that affect them personally on a daily basis is very unfortunate. I am fully aware that there are plenty of environmental problems in the countryside and that these also affect people in the city, but the most acute situations that my informants who live in the city, are affected by must be further highlighted As can be seen in the account for the empirical material, the informants are aware of the environmental problems they are affected by, and also their nature, some of their causes and are above all willing to do something about it. This is what they express, and from my observations in Nairobi, many people put these words into actions. To which extent this involves all my informants I cannot say, but if there is a will, there is a way, as the expression goes.

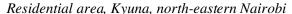
#### Sustainababble?

Sustainable development is mentioned throughout the NEMA (2004) report. That expression was only mentioned to me once or twice during my entire stay by informants and others. From this I can draw a loose conclusion that this is not a term which is commonly known, used or acknowledged by everyday Nairobi citizens. Thus, I am curious about the choice NEMA makes to use this term so frequently. Does it mean anything to the Kenyan people, or are they as confused about it as I believe most people around the world are (based on the frequent debates on how it should be defined)? I cannot answer this question with any certainty, just ponder that it might be a mistake of NEMA to not find the foundation of their recipe for solving environmental problems with the people affected, using a language that makes sense to them. The modernity that the Kenyan government and NEMA try to apply to Nairobi is unfortunate as it is inconsistent with the reality and possibilities of most it's citizens. To have the waste management ruled by the power of money is one of the causes to the total domination of garbage that makes out the Kibera environment for instance. It becomes increasingly obvious that Nairobi is run in an attempted modernity manner. However, my informants are generally unable or unwilling to comply with this notion, as they lack means or do not tend to agree, and that causes much of the evil spiral of environmental degradation in Nairobi.

NEMA addresses some of the most important environmental issues in Kenya, but only very shallowly, and correspondingly only briefly presents plans to solve these. There is, in

spite of NEMA's own establishing that there is a rapid urbanisation and problems following its tracks, a lack of focus on the urban environmental problems. This might not show in my account for the NEMA report, since I have picked out parts that deal with urban environmental problems, but it is clear when taking part of the full report which primarily addresses rural and wildlife/biodiversity issues.







Residential area, Kibera, south-western Nairobi

There also seems to be a lack of communication with the people; NEMA strategies are top-down ways of working, even in the awareness raising projects. The people should not only listen to NEMA, NEMA should also listen to the people. One can also conclude that to a country like Kenya, in an African and international context, focuses on economic growth and development, which is easy to understand. There are signs that point to that the Kenyan government has started to understand the connections between being able to achieve this and having a healthy environment, while the understanding is greater among the people who are truly affected (a matter which will be enlightened in the next chapter). If NEMA also can get to this point, they would be on to something important. However, without international support and understanding it might be difficult to implement, even though intentions are demonstrably good. Even if not all the people in Kenya are or want to be ruled under money, the government is so by force and, not putting the importance of wealth and development aside, the acute problems must be solved. The answer seems to lie with the people. To quote one of my informants;

There are also many NGO's and now there is also NEMA; which I am sure you have heard about. Kenya has also ratified many conventions, it is working but there is still room for improvement.

(Informant 21)

I think these improvements lie in an improved communication and an attempt to have continuity between the legislators, implementers and the people affected. NEMA as a state institution is in itself a modernistic phenomenon (Giddens 1990: 17, 34f), but the systems of

expertise that they both present and provide are failing. Nairobi is clearly both a capitalistic governed society as well as an industrial, making it as an urban area, innately modern (Ibid: 59f). It is also a society with high risks that demand for great trust from the people. The risk and trust aspects of modernity, is accounted for in the following chapter (c.f. p 48). The slums are what Giddens (1990: 41) would call risk environments. Not only are they environmentally degraded, but also hazardous and characterised by failed systems of expertise. The systems of expertise, which people in modern states rely on, are things such as waste collection, power access, sanitary facilities and proper housing. These are all things which are not present in the slums of Nairobi and which are scarce in Nairobi in general. The slum inhabitants are not even recognised as Nairobi citizens as the slums are informal settlements. As long as this remains a fact the failed systems of expertise will not come into function and the inhabitants will still be subject to having to trust a system they know from experience is not working, simply because they have no choice.

## The non-officials' version

When I worked out my question outline I based it on what I wanted to learn and find out from the interviews. The questions were divided into four abstract themes to have an easy and overseeable disposition of them.<sup>5</sup> Each theme is relevant to the discussion on environmental perception and the dichotomy and combined I hope to give a broad picture of the informants' perceptions of the Nairobi environment. The themes highlight different aspects of the dichotomy, modernity, poverty and religion, all aspects which are relevant to this thesis. The first theme is the basic foundation of the purpose of this thesis, while the other three themes give the informants a chance to elaborate and explain why and how they relate to environmental and cultural aspects of their lives in Nairobi. The second theme is important to understand how significant the environment is to the informants and to get an idea on how enlightened they are about environmental issues on different levels. Theme three puts the issue of the relationship between humans and nature on the edge where the informants themselves verbalise the relationship and are given a chance to elaborate their perception of their own and human beings' general role in the environment. In the forth theme the important relationship between rural and urban areas come to terms. This can be seen as a chance for the informants to verbalise the differences between rural and urban, a common dichotomy in itself. However, it should foremost be seen as an opportunity to get an insight into the complexity that makes up urban Nairobi life and how urban citizens with strong rural connections reflect on these allegedly very different environments. More about the purpose of each theme can be read in the beginning of each.

## Theme 1 – Definitions on environment, nature and culture

The first three questions were the most straightforward in relations to the dichotomy and can be categorized into questions of definitions; theme one. The first and most important question is; "How would you define the environment (can you tell me what the word environment means to you)?" (1.a), and was asked in all interviews. The second question; "Can you define nature, (is it anything different from environment)?" (1.b.) was posed in about half of the interviews. The third question, asked in the vast majority of the interview, is as simple as; "How would you define culture?" (1.c.). These three questions are at the essence of what the purpose of this thesis is all about.

The reason for the uneven distribution of these three questions throughout the course of my twenty-eight interviews is quite simple. My initial aim was to ask them all, but five of my first seven interviews were done in Kibera, where the level of the informants' English was very low. The word 'environment' is an existing word in Swahili; this is the word 'mazengira'. The word "nature" does not, however, have any equivalent in Swahili, which was the common language that the translated interviews could be done in. The translation of "nature" into Swahili was often "mazengira", the Swahili word for "environment", which took away the whole purpose of the question.

The most frequent answer to question 1.a. is 'around', 'surroundings' or 'surrounds'. Sometimes the words are accompanied by words like "natural", e.g. natural surroundings, but most of the times it is used in the sense of everything that surrounds you as an individual, no matter when and where. What is also interesting is that when these words are not used one of the most common themes in the answers is of a social nature. The informants refer to such things as lifestyle, social, political and economic factors, or describe if the environment is a good or a bad place in regards to their living situation. This indicates that people, especially the ones who have poor living standard, think of the environment also in terms of social

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<sup>&</sup>lt;sup>5</sup> A list of the questions can be found in appendix 2

features. However, there is also another aspect which comes out in the answers when things such as trees and air are mentioned in the same sentence.

This is also revealed when compared to question 1.b. and its answers. Often the answer to this question is that nature is something which is within the concept of "environment", although it can be distinguished from it in theory. The answer "nature is part of the environment as seen in things, the environment hosts' nature. In nature studies it is about the living things, but nature is more, it is where the living things live" (Informant 19) is an example of the perceived connection between the two. This is an example of that, distinctions and separations of matters can and are done in Nairobi, but not in the same way as in western science, an issue which was elaborated in the section on dualisms and dichotomies above.

The most common answer to question 1.c. was "it is a way of life" (Informant 23). It is clear that culture is something that determines the lifestyle for not only one person, but to several people, e.g. a community, for most of my informants. Often it is mentioned together with traditions and the past; this I can only see as an expression that culture in Nairobi is sometimes associated with the way people in rural areas live and not so much in the city. On the other hand, as we have seen, and will see, many of the informants are keen to call upcountry home, meaning that they both are mentally there and not at the same time. Another way of interpreting the answers to 1.c. is that also the people in rural areas have moved on and that (culture) "It is the way of the past" (Informant 6.b) for a small number of people.

What is worth noting is that many of the informants associate environment and culture, stating that both environment and culture are about life (Informant 12). To them who do not consider culture to be a thing of the past the answer that it determines habits, food and that action are followed by the determination of the value of things. This means that if a specific culture values the environment so should the people of that culture.

What really needs to be emphasized here is the responses where things such as, not only values, but also norms and attitudes are mentioned in the frame of culture. It is thus, according to some of my informants, the basis for behaviour on a group basis, as well as individual level. Many of the informants are very specific that culture is something which is shared by many; a community, but I wish to add that each individual is guided by that culture(s) to which they belong (Eriksen 2000: 47).

## Analysis of theme 1

## Poverty, culture and possibility

Unlike we might assume about people with strong connections to up-country and rural culture we must not forget that many are born and raised in the city and are not so familiar with up-country. Instead they are governed by the terms and values of the city or even the slum and culture is not always equivalent with environmental bonding and harmony. "/.../ people throw things everywhere; they are not socialized to not do that." (Informant 22) very expressively said as a response to question 1.c. meaning that the slum environment is to some extent destroyed because it has not been a part of their socialisation to learn that littering is destructive or wrong. This is an example of when the extent of the environmental degradation has reached a point where it starts to be perceived as normality. The fact that people who live in an extremely polluted environment themselves start to litter is not strange. It is neither a question of whether it is culturally determined to throw garbage nor is it a matter of fact. The problem derives originally from the problems addressed by NEMA (2004) and UNEP (2005), i.e. the policies and the implementation of these which are not working (UNEP 2005, Prakash 1997: 23). Instead they are contributing to making littering an unavoidable part of the slum inhabitants' lives to the extent that they themselves start to perceive it as a matter of culture.

In the slum the most obviously important thing may not seem to be the environment, something which also came out clear in the interview with the NEMA-official who claimed

that slum-living people lack awareness of the interaction between environment and socio-economic problems (Informant 13). The impression I got from my other interviews was quite the contrary; many of my informants expressed environmental concern and related the environmental problems they were surrounded by to problems such as unemployment and high crime-rates. However, they so far do not seem to relate to the environment in the way that the modern Swede does, as described by Löfgren (1979) above in the section on humans in the industrial society, and as I will return to further down.

#### Tribal influences on environment and culture

Another aspect which is important to add to question 1.c –answers analysis is the one of tribes. Tribes are many and diverse in Kenya and have not always been friendly to one another. Kikuyu is the biggest tribe, followed by Luhya and many people, also in the city, identify with these, I assume because of the close connections to up-country (Internet 12). The informants thus often add a (implicit) tribal perspective to their definitions which sometimes is expressed in the use of the word 'community', which I mentioned above. The tribal perspective is still, important in Kenya and to Nairobi inhabitants' identification process but is not necessarily a mean of segregation in the everyday talk of people, although it is more apparent in the physical segregation (Gugler 1996: 235, 237f). What tribe you belong to is important in a general perspective but not so much in defining culture per se; the tribe, no matter which, represents the culture and what is associated with it. The quote "Culture is traditions, beliefs, indigenous practice in any given group of people; tribe, nation and so on." (Informant 28), is one example of this, but also an example of widening the definition to include larger segments of people. This means that this informant is an example of people who have moved on from the strictly tribal definition of culture to see that there can also be a Kenyan culture. Acknowledging that there is more than one culture is also connected to these statements; within the country and on a larger scale, e.g. nation-wise.

The basic definitions are, to sum up theme 1; that culture is a way of life, it is community based, that it is connected to the past and traditions, that it is changed and that it determines values and behaviour of the people of that culture. Further, the answers indicate that the word nature, when used, was something included in the definition of the environment but had a different meaning of a more western kind. The word environment on the other hand did not only contain the concept of nature on a wider scale but was also the word my informants used for their surroundings in the city. Thus from both a principal point and from a relevant point of view the use of the word environment seemed not only more relevant but also important than nature both to the informants and to this thesis in general.

## Theme 2 - Opinions and descriptions of the environment

The definitional questions were followed by questions on description and personal opinions of environmental matters. These questions are important because they say something about the personal aspects of the informants' opinions on what is important or unimportant, why they believe it to be so and also something about their own perception of their potential effect on the environment.

The first question in this theme is; "Who do you think is responsible for keeping your local environment clean?" (2.a). This question was meant to make the informants reflect on their own possible role and responsibility towards the environment, issues that later will be returned to. A remarkable amount of people answered the question with 'me', i.e. putting much of the responsibility on them selves. Another common response was that 'all of us' or 'everybody' is responsible. A combination of the two might be the most common response,

starting with taking on responsibility and then extending this responsibility to the nearest community and on to human kind or at least Nairobi citizens as a group.

What is interesting is to see how the answers differed between different groups of the informants. In the Kibera-slum interviews it was evident that many of the informants felt powerless regarding the situation and taking own actions towards a better environment. Their situation, some expressed, is so bad that they hold no means of improving their local environment without outside assistance. These informants also most frequently put the responsibility on someone else at first, but also expressed a wish to be able to contribute to a better environment themselves (Informants 3 & 6.a.). Having been in Kibera and seen the poor conditions that these people live in, I am not surprised about the feelings reflected in these answers. Many, however, had high hopes in NGO's and foreigners as well as local projects and their own role if only help was available. Nobody, including the inhabitants, wants their children to live in an environment such as in Kibera. Thus a will for improvement, and some good ideas, are ever present.

Some informants, throughout the selection, also mentioned some government instance as responsible. Not at least the Nairobi City Council (NCC) and the Minister of Environment (with no further specification) were mentioned but also the international community. Informant 6.a. made the clever remark that they do pay taxes (even if I cannot vouch for the amount of taxes this Kibera-based informant contributes with), and thus the NCC ought to be responsible. Nairobi citizens seem to be fully aware of, but not in approval of, paying for all public services out of their own pocket.

Another interesting aspect of the answers to question 2.a. is that although the question does not contain any element of potential reasons for keeping the local environment clean, many informants noticed the underlying meaning in that respect. The answers ranged from "the people in that environment, we should have that respect, according to the Bible." (Informant 15) to "because we all benefit directly from it (cleaning the environment)" (Informant 19.), i.e. displaying all sorts of insight and reasons for keeping the environment clean, from religious to natural science. One informant (28) also referred to a Kenyan law that makes it illegal to pollute and thus it is more an issue of actually keeping the environment clean (as suggested in the question) than of cleaning it, as most of the informants seemed to interpret the question. The bias in this direction can I only interpret as a direct response to the extremely polluted and dirty environment that most Nairobi citizens face everyday.

To sum question 2.a. up the perception on who are the main actors responsible for a clean (local) environment is the individual, and the community in cooperation with the government. There is also a difference in the perception of your own ability and capacity of living up to this responsibility, which seems to be a question of financial status and general living conditions. The reasons for this responsibility vary between informants and include religious aspects and a notion of humans as an integral part of the natural ecosystem.

The second question put the personal interest and its reasons into focus. "Are environmental issues important to you, and if so, why?" (2.b.) was often responded to in a very convincing way, making me believe that many of the informants really wanted to convince me of their interest. The reason why I posed this question was mainly to get some insight into what extent the informants had an interest in the environment and why. More than I expected, the answers to why was quite varied. "Because they are the issues of life and death" (Informant 21) is one answer that hit me as a common point because even though most informants said something about health, others about the concern for future generations, for present generations, the intertwining of humans and nature in the ecosystem or the concern for war, it all boils down to the issues of life and death. Even if an answer was not extensive most of them were

pronounced after thought and in a manner which made the impression that their answer is significant.

The matter of health seemed to be of a great importance to the majority of the informants, especially amongst the slum inhabitants, but also people from educated and/or upper-class backgrounds expressed concern over the dumping and pollution in Nairobi and the effects on humans and the environment. Even direct connections between health and a green environment were made without further explanation, as if this was considered to be an obvious matter – something that may not always be the case in a western context where the access to certain man-made resources are held out and the more distant environment has lost it's significance (Giddens 1990: 27). In the slums it is both interesting and not so strange that matters of health are brought up in the environmental context. The immediate environments that ARE the slums, are diverse, but share some important attributes. Infrastructure is poor or non-existent, as well as is housing, electricity, water, sanitation. Food and garbage is left to pile up everywhere since there is no possibility for these people to have them removed. The slums are health hazards in themselves and people are suffering from extremely poor sanitation and hygiene conditions. The environment that these people live and exist in is dirty and polluted (NEMA 2004: 57-75). What I found interesting is that many of the informants, who are situated in the slums, did recognize the connections between health problems and a poor environment (Informants 6.1.a.nd 6.b). This is in spite of that government and NGO representatives told me that the connections between social and environmental problems in the slums are not recognized by the slum-dwellers themselves (informants 12 and 13).



Child in polluted water stream, Kibera)

Also, quite a few of the informants addressed the issue on future generations in regards to question 2.b. Some of the informants were enlightened about the Kyoto Protocol (e.g. Informant 16) and others expressed deep concerns about the ability for future generations to sustain themselves and to have a good environment. One informant took an example from the past telling me that his grandfather created a shamba (Swahili for garden or plot) and asked me that if his grandfather had cut down all the trees in that shamba then, where would he now get building material from (Informant 17). There was a very high sensitivity to the connections between past, present and future and that actions committed in the two former time-periods would affect the present and future. This can be interpreted to be in line with

NEMA (2004) policies and the notion of sustainable development. One must, however, remember that this notion is one were also an economic emphasis is made. In the case of the answer of informant 17 sustainable development in its' present non-specific definition is not the issue. The thought is the same, but as we can see in this as well as in answers to all my questions, the environment is unexchangeable to the informants and even if there is an economic aspect it can never dominate over the environmental and basic concerns.

What I sometimes noted when doing interviews in the slums was that there was a frustration, like the one we saw in the former question on responsibility. One informant said "Yes, it is important. We want to do more, but we can't." (Informant 7). This is what it comes down to – comprehension, willingness but a sense of powerlessness that all are very prominent in the people and areas that are the poorest, just like in question 2.a. The concern is not only personal or about the environment in general but also touches the situation of the informant's neighbours, people in neighbouring countries and future generations.

The third question in this theme is about the informants' perceptions on their personal affect on the environment, if one; "Do you think that you have any negative or positive affect on the environment (as an individual/in your daily life)?" (2.c.) (the ending in brackets were sometimes used to elucidate the question) was the question asked. To see if the informants perceived any type of effect on the environment is an important key to understanding the connection between perception and action, but it can also expose what people consider to be an affect and how much impact their own actions actually have.

Many of the informants reacted in a defensive way to this question, exemplifying the guilt I believe many people feel when they are concerned but not really make an effort. There is however a difference, that is my perception of some general traits of these Nairobi citizens; for example many people, especially the youth are involved, voluntarily, in environmental groups or NGO's. Yet many other people actually plant trees, participate in clean-ups and actively work for a cleaner Nairobi environment. This sense of activism also shines through in the in the majority of the informants' convincement that they have some sort of impact on the environment. Most of the informants focused on the possible positives, forgetting or ignoring the negatives, which I then had to ask them about again, although the opposite scenario also occurred. What also is striking is that many of the informants refer to positive environmental affects such as enlightening about HIV/Aids, education and cleaning the house. This adds on to the social aspect of environment in a context where environmental problems truly affect people on a daily basis, tying together culture and the environment once again. It also displays the level of change they can contribute to and something about the characteristics of the environment they live in; to educate about HIV/Aids is a positive contributor considering the epidemic in Kenya and great parts of Africa. When it comes to cleaning the house it may sound silly to someone who has not visited the Nairobi outskirts; to do so is heroic in itself, especially in the slums.

The one thing that most of the informants admitted of being guilty of was littering when they know they should not. To not do enlightening and/or education was also often mentioned as having a negative impact on the environment. It seems like this wish to enlighten others, is an indicator that also others believe that perception and action have common ground. Yet others again, talk about the extended and involuntary negative affects they have on the environment, in e.g. having very few choices in their consumption. This comes to light not least when it comes to the hazardous and frequent plastic bags, which are impossible to avoid and are littered all over Nairobi, (UNEP 2005: 23 c.f. above in the account and analysis of the NEMA-report). However, also a product like sugar is mentioned in this context (Informant 17), pointing to an awareness of the importance of consumption patterns and their extended environmental affects.

The lack of ability to act is also here mentioned by some informants, like in the former questions in this theme. "I don't see us contributing good to the environment in any way. We are not able to do good." (Informant 6.b) is one of the answers that show willingness without means. As I have mentioned before the Nairobi system is more or less based around the ability to pay for services and when people are unemployed that becomes extremely difficult. To get encouragement as well as concrete financial and mental support are important aspects of helping the slum residents to be able to achieve a cleaner, less hazardous environment. The poverty situation in Nairobi and Kenya at large is, at least partly, due to failure of the government to take care of the massive urbanization that has occurred during the last decade or so, confirms Sida (2005: 12).

Not all of the informants were, however, as aware of their own affect on the environment. "I don't see myself contributing in any negative way. " (Informant 9.b.), I was told by a woman. This should however not be thought of as ignorance, but more as an expression of believing that what she actually does to improve the environment has an impact. Like everywhere in the world, many people in Nairobi do not fully comprehend the extent of many everyday activities human beings have in a negative manner for the environment. When actions on making it better are taken, those are the ones acknowledged. I think everyone can agree on that it is more fulfilling to contribute in a positive than negative affect and to focus on the positives.



School children in Mathare Valley

Again the perceived (in)ability is a key factor, as well as the actual participating in clean-ups and tree-planting are important factors in people's own perception of their environmental affects. Money is always important, but not everything. Also people in the slum areas clean and do what they can, or so it seems from the answers. It is fantastic to see that people actually voluntarily participate in clean-ups of garbage (although to which extent it is voluntary can be discussed when the only other option is to live with the wastes). At the same time the informants expressed some sort of guilt of not doing more. Here, as in the two former questions, other aspects of the environment are addressed, such as indoor environment, safety and social problems.

<u>Proceeding with the theme, the fourth question is:</u> "Do you ever think about global environmental problems (and if they affect you)?" (2.d.). This question was included to grasp yet another aspect of the informants' view on environment and also to see if they are aware of global environmental problems, to what extent and which problems they might be concerned about.

The most striking aspect about this question is the overwhelming number of positive answers, and the diversity among these. This was highlighted by how almost all the

informants answered yes to if they think about global environmental problems, but the continuations of these answer varied. Here everything between the El Niño phenomenon, the depletion of the ozone layer, the wars in Iraq and Somalia, tourism, global warming and pollution mentioned (informants 3, 6a, 8, 9a, 14, 18, 21, 24, 28). What was fascinating to me was that so many people mentioned war and war consequences like refugees, the spreading of land mines, smoke and pollution from weaponry, the threat of nuclear and chemical weapons and trans-border conflicts as concerns. Perhaps this gives a hint to the situation that many people live in, in Kenya, close to Somalia (where fights between the Somalis and Ethiopian and US' troops were going on at the time of the field work) and with a colonial past.

It was evident that many of the informants were concerned about potential and real global environmental threats, but also that they were not fully up to date with what is considered in the global discourse as an environmental problem and the actual affects of some global or international event. The point which I am aiming at is that an environmental problem, global or not, is not always the same to everyone. The cause and effect relationships were, as noticed, not always accurate; "There are wars going on around this country. The weather can change because of the weapons. They pollute and spread disease." (Informant 4) is in one sense an expression of that person's perception but also of lack of education and correct information, that obviously has caused confusion and misapprehensions in this particular case. These types of answers are a clear indication that people are aware of that there are problems, but are due to lack of education, somewhat ignorant to the nature of these problems. The concern is nonetheless there and should be more encouraged and acknowledged by NEMA (2004, Informant 13) who currently do not. The aspect of inability to act and the sense of powerlessness, that some informants have, are once again expressed in the answers to question 2.d. One of the answers was: "Yes I do. But I have a feeling of not being able to make a difference." (Informant 1), which is illustrative for many of the responses given to me.

Two problems that were commonly addressed were the El Niño and the depletion of the ozone layer. The depletion of the ozone layer was often connected with general pollution, global warming and sometimes even with pandemic diseases like the bird flu and SARS (Informant 21). It is apparent to me, that most of the informants were informed about some of the important global environmental challenges and, put in Kenyan context, become issues of concern. The perception of humans, nature and society as parts of the environment shines through also in these answers; it seems to me, even if terms and problems are from a strictly correct view sometimes confused with one another.

It further seems to be that the informants have sometimes learned "the hard way" that Kenya is under pressure from e.g. global warming. Two informants (6.a., 22) tell me that Kenya has lately been plagued with extreme weather conditions which have raised awareness, both generally and with that particular informant. Also news and media act as awareness raisers, although people in the slum have very limited access to electricity and luxuries like a television. What is again of interest is that although it is difficult to obtain proper information and the expressions of powerlessness, some informants also tell me what they do try to solve problems; their participation in clean-ups, personally initiated tree-planting and awareness raising are among the common actions towards a better environment. With the exception of two (Informants 24 & 25), all the informants not only think about global environmental problems but also are concerned that these will affect them now or in the future.

Question 2.e. reads; "Do you like your surroundings where you live in Nairobi (and why/not?" (2.e.) and was believed to lead to an insight of what kind of environment the informants preferred and to get a description of their city environment and to act as a part of comparing city and up-country. The latter is a matter to which we will return.

Even if the majority of the answers I got were positive in regards to whether they like their surroundings there was still a lot of negative responses. Many of the informants gave two judgements and then motivated the different answers. Often this involved defending their choice to live in the city and a brief insight to the social problems in both places. What is clear is that the answers and motivations depend much on the location of each informant's residence. Some of the Kibera-informants responded positively to the question, but with a follow up phrase saying that "Yes I like it. Because here I can afford to stay." (Informant 5) suggesting that the reasons for liking the place is more based on the ability to survive than on actually enjoying the environment. Not all informants are happy with their surroundings, and these include both people who live in the slums and people who do not. Most of the sluminformants seem to like their surroundings due to survival possibilities. The informants who live outside the slums are "pickier" and complain about things that are plain normal in the slums, such as open sewages, lack of trees, and burning of garbage.

Some of the upsides of living outside the slums seem to be better facilities, systems for garbage collection work, open spaces and many trees. Both slum inhabitants and others of my informants give financial and convenience reasons for liking their surroundings. This is in spite of the problems with lack of sanitation, garbage management and water access that were brought up in the account for the NEMA-report. The biggest problems are lack of trees, fresh air, space and waste management. Many of the informants like their surroundings in the context that they do not have much of an option and that in some cases they cannot see themselves having it any other way, because this is the only environment they have or will ever have the chance to live in. It is thus not so much a question of liking it per se, but more of accepting and making the most of your situation, but with a wish to improve it. The little access to facilities and the mere awareness of that these are accessible under certain conditions for many people in Nairobi must be a strong enough driving forces to keep up hope for the informants. The perception is that the up-country they left provides them with no opportunities, but the city does even if the current conditions under which they now reside may be worse than up-country. Considering that, people of the Nairobi slums, are left with no choice but to accept and like the environments in Nairobi, as well as the facilities that are out of their reach. NEMA and the NCC have utterly failed in providing these people with basic necessities in their attempts to create and maintain a modern Nairobi.

The fact that NEMA (2004) almost exclusively bring up environmental problems in the city in the same sentence as slum or informal settlement may shade some light over these answers as well. Although, in my experience, Nairobi is not without problems in any location, but the extent of these problems varies. This has been exemplified by the garbage collection policies and the facts that the worst environmentally degraded areas are not even admitted officially to exist as mentioned above in the account for the NEMA report. Nairobi is also a city of contrasts and segregation, a fact that comes out both in the interviews and my pictures but which is also confirmed by Sida (2005: 12).

## Analysis of theme 2

## When the system works against the people

According to Maslow (1970:35-58) there is a hierarchy of needs, which can be compared to a ladder. This ladder can explain human behaviour in specific situations. The more basic needs can be found at the bottom of the ladder. In order the needs are; physiological, safety, sense of belonging, appreciation and status. In the way Radetzki (2001) would see this, the environmental needs would come higher up on the ladder, i.e. be less prioritised, since environment is something one can take the time to care about in times of wealth and prosperity. In the case of people living in the slums of Nairobi, I would say that the exact opposite is true. As we have seen from the NEMA (2004) and UNEP (2005) reports there are

grave insufficiencies in the policies and instruments at hand for improving the slum environment. The people in the slums suffer from unemployment and diseases at a high level. In combination this is not a good initial point for feeling empowered. However, it is a good starting point for understanding that the most basic thing in your life is to have an improved environment. The system works against the people of Nairobi's slums; they are, as pointed out by NEMA, not even official residents and thus gain little or no civil rights. In such a system it is difficult to make progress on your own and the state of the environment in Kibera is such that it needs more than the inhabitants themselves can provide. That they have realised and this is what comes out in their answers; powerlessness but not hopelessness, because stooping to the latter would be to give up on life.



The tree I planted in Pendo Moja workshop's shamba

#### Urban poor and environmental degradation

Many of the environmental problems that are mentioned in the NEMA (2004) report, such as disease, crowding, lack of water, are also brought up by Guha & Martinez-Alier (2000: 64). These authors are keen to point out that not all diseases are related to poverty, but some are and these are prone to grow in poor environments. Just like the people of Nairobi have a problem to pay for facilities and resources like water and waste disposal; these are typical urban related environmental problems (Ibid.).

The fact that being wealthy enables one to contribute to a cleaner environment "does not mean that they are any more ecological" (Guha & Martinez-Alier 2000: 68). They point out that the amount of waste produced by wealthy people and nations is much higher than by the poor, and that the latter produce much less of both solid and liquid wastes. The problem instead lies in the tidying away of wastes and the systems behind the collection of these. The expenditures by the state on noise reduction, garbage collection, drainages, sewerages, and pollution are considerably smaller in poor nations than in wealthy. Low public expenditures prevent environmental protection, at the same time as urban development and increased income contributes to a higher amount of environmental degradation, Guha & Martinez-Alier (Ibid: 68f, UNEP 2005: 15ff) claim.

The increase in energy and material consumption that follows an increase in wealth also speaks against a casual relationship between wealth and less environmental damage (Guha & Martinez-Alier 2000: 70). In wealthier economies mass consumption increases, thus the straining on environmental resources also increase. The demand for what is known as positional, or luxury goods, also increase and alternate, putting an even higher pressure on the environment. What needs to be done is an ecological and economical redistribution in the world, rather than economists in an affluent context, like Radetzki (2001), putting a heavier

load of responsibility on the world's poor people. The illusion that Radetzki illustrates is successfully punctuated by Guha & Martinez-Alier (Ibid: 75). On the contrary economic growth is shown to lead to an increase, not only in consumption, but also of waste, something which will be harmful to the poor sooner or later. This is a subject to which I will return to in theme 3.

#### Disembedding

The issue of finance and money is deeply interconnected to the notion of modernity and is one of the factors of disembedding. Disembedding is a complex process which, according to Giddens (1990: 29f), is fundamental to the nature of modernity and to the social changes connected to it. Giddens identifies two mechanisms for disembedding; the creation of symbolic means and systems of specialised expertise. Giddens (Ibid: 30) chooses to focus on money as the ultimate symbolic mean, and which is crucial in the modernity process. Money enables free exchange between commodities and services and makes everything exchangeable. Even in a non-physical form is money acknowledged as a mean of exchange or to keep track of economical affairs between people and institutions of various kinds, here in the form of debt receipts or digits in a computer. Thus, the notion of money is in itself a separator of time and space since a physical transaction between two parties does not have to be made at the same time, and now in the computerised age, not even on the same continent. Hence, money is a mean to create distance in time and space and thus a leading cause of disembedding and of modernity itself (Ibid: 30ff).

Both symbolic means such as money and systems of expertise are mechanisms of disembedding, but are also dependent on the concept trust. What Giddens (1990: 33ff) means by systems of expertise is the technological and professional expertise that the modern society is dependent of on a daily basis. Even though a person does not come in day-to-day contact with its members, we all continuously make use of it, trusting that things function as they are supposed to. I, as an individual, am not familiar with the knowledge on which my house is built on, and yet I trust it to not fall to pieces, according to Giddens (Ibid: 34). This is yet another way of separating or delaying social relationships and contacts from its immediate context. We do not know the people who built our house but we still trust them to have done a good job, since they are the experts in their field. There are also, to various extents, control mechanisms of the experts making sure that there are laws which a contractor has to follow when building a house, to ensure that the system is trustworthy (Ibid: 35f). The discussion on this issue, concerning trust and risk will continue in the analysis of theme 4.

The people of Nairobi, in general, and of its slums in particular, are also subject to both systems of expertise and the domination of money in their lives. As is evident, these systems are failing in the Nairobi context; the systems of expertise cannot be trusted because of poor management and often not used because of lack of money. Nairobi and its citizens are thus part of what seems to be an attempted modernity or governmental strive to fit into the characteristics of it, but is continuously failing to fulfil them.

#### Trust and risk

An additional point that Giddens (1990: 17ff) tries to make is one of the relationship between trust and risk in the modern society. This is both a uniting and separating force of modernity since the state and its institutions have both provided people with safety and better living standard but at the same time also produces (world) wars, genocide and not to forget an ecological destruction that all have been enabled by the modern state. The political power is bigger than ever, as is technology and its forces and possibilities for good and for bad (Ibid; 17f). According to Giddens (Ibid: 39ff), trust is innately separated from time and space; one does not have to have full information on something to trust that it will work. However, this

always means taking a risk, consciously or not, and thus, simply expressed, trust and risk are intertwined in modernity. In modernity there are also, not only individual risk taking, but also risk environments, where the ecological destruction of our Earth is one which affects a larger number of people. I here would like to refer back to the discussion on disembedding and its mechanisms where an account for question 2.a. was made. Trust and risk society is intertwined with the failing systems of expertise in Kenya, that are unable to live up to the expertise they promise but still forces the citizens of Nairobi to rely on, forcing them to become risk takers.

#### Garbage problems and maintenance of the slums

One example of a failing trust and risk society is the Nairobi system, where access to money determines your possibilities in life in many more aspects than in e.g. Sweden. One example is garbage collection; in Sweden the municipality is responsible for the garbage collection. The costs for the collection is either a part of your rent or direct living expenses (e.g. rent or fees to the tenant owner's-association) or are dependent on how much garbage you and your family produces. Thus, recycling at source is encouraged and the amount of garbage is quite low; the systems of expertise are working quite well. In Nairobi, the system is different; the fees to the garbage collectors seem to vary more by area of residence than actual amount of garbage produced (UNEP 2005: 17). Further on, people in the slums rent their accommodations, but are themselves responsible for the collection of their garbage, an expense which is very low prioritized in a situation where you have trouble feeding your children. To add on, plumbing, sanitation or toilets are not available in the houses and are sometimes privately owned; i.e. there is a fee, leading to phenomena such as 'flying toilets' (see also p. 24). The problem of littering in your own neighbourhood is thus not a matter of ignorance but of lack of resources, employment and a failing system of expertise (UNEP 2005: 15-23). This was something I experienced that even the most uneducated people understood and were well aware of, in spite the attitude of government officials (Informant 13.).

# Theme three – religious outlooks on environment, nature and culture

In this the third theme I have asked questions that are of a more philosophical and religious nature. They are not to be intended as a starting point for an analysis of the informants' religious views per se. The answers I received should be seen from a practical point of view. The questions were posed to give the informants a chance to reflect on their own role in the environment and what possible affect tradition and religion could have on these. What I wanted was to hear the informants verbalise their view their relationship with the environment. In the next two questions they got to elaborate this line of reasoning.

The first question in theme 3 is; "What do you think is your role in the environment as a human being?" (3.a). It is a direct question, but relevant in the context of the theme. Sometimes confusion arose and a clarification of what I meant with the question, e.g. with 'do we have a part to play?' was necessary. In some cases, as with examples above, informants reacted defensively; "If I could get money.... If life is better than also the environment gets better." (Informant 4) is an expression of that. The informants who gave similar answers to question 3.a. all gave expression to that human beings do have a part to play in the environmental context and that it is one of responsibility. However they also perceive their possibilities to themselves take that as very small. These answers also imply that the informants perceive that there is something wrong with the environment, particularly where

they live. They further indicate that the perception of the environment is one of paternalism, one of the paradigms which were mentioned in the theoretical frame chapter. Pálsson (1996: 78) claims that many farmers share the paternalistic view of human-environmental relations, but that it is also an early Christian outlook. Many of the informants have, as mentioned earlier, strong connections to farming and families up-country. They are also strong believers in the Christian faith and more than often, as we will see further on in the thesis, referred their perception of human-environmental relations to that faith.

Many of the informants put themselves in the centre of the environment, also claiming a big responsibility towards it, referring to the fact that they are an integral part of it. A major part of the answers bring up cleaning, taking care and improving the environment directly, e.g. through cleanups or tree-planting sessions. However, there is also a group which is more interested in raising awareness and sensitizing people to the problems and solutions. In some cases these two approaches go hand in hand (Informant 22). Informant 22 lives in Mathare Valley but expresses a concern and belief in that change can come and further puts her self in the centre of that change. This line of reasoning is different from most of the informants in Kibera who, as stated previously, did not see many possibilities for themselves to act. From my experience, the Mathare and Kibera slums share traits but are also in many ways different. Kibera was much more littered and crowded, while Mathare appeared to have more proper housing and less garbage piles. These are concrete environmental factors which may affect the perceived ability to participate in the creation of a better environment and to actually have an active role in the environment. These are wishes that in both areas are expressed as well as by other informants.

A positive and very precise way of answering question 3.a. came from informant 21:

The environment is the source of our livelihood. My role is to encourage people to live sustainable lives...no economic activity should come in the way of sustainability- so I try to educate people, persuade and through practice, I have planted some trees. Also in the churches - this can be done by preaching. So persuading people...I find that people have a lot of knowledge but they put the responsibility on someone else...the problem is attitude, people have the wrong attitude. (Informant 21).

Informant 21 is a well educated and a quite well-born man and is thus in many ways different from many of my other informants. His answer to question 3.a. was very articulate, also in the sense that, it captured the essence of what the overall attitude in this particular question was among my informants. However, it should also be noted that his understanding of the informants who live in Kibera may be very limited, since Nairobi is a city of segregation and enormous inequalities (Sida 2005: 12, Internet 13). Thus, in saying that people just tend to put responsibility on someone else may also come from him being ignorant. On the other hand, informant 21 did not specifically refer to the slum-living people in his answer, and in Nairobi, like in many other places, people are declining responsibility and thus, I agree in many aspects of this reflection. The quote also compiles many of the perceived traits of a person's role in the environment; the interconnectedness, the responsibility, religion, economy, attitude, persuasion, and practice.

One informant took in the aspect of sustainable development and bringing in the prospects of future generations (Informant 28). In doing so he joins the international discourse on environment as referred to previously in this thesis. It should be mentioned that informant 28 is a college teacher in the field of environmental studies and thus have another vocabulary and mind frame then the majority of my informants. Another informant mentioned, not only conservation of the environment, but also the responsibility to look after sick people

(Informant 24). Informant 6.b. states that her role is to take part in creating a well-functioning community with income generating activities and where people's lives can become better.

To understand and contextualize the perceptions of urban citizens today, it is useful to get some sort of understanding of the perceived (and earlier) rural human-environmental relations. The second question in the theme thus reads; "What is the traditional way to look at the environment where you come from up-country?" (3.b.). It is a question which could be perceived as unorthodox, especially in the use of the word 'traditional'. What I mean by that choice of word is the old beliefs that may or may not still be practiced up-country and which are not modern in the sense that they are not part of an urban lifestyle. It is also a way of using a word which I assumed non-academics would understand. At the same way it is quite an open field as it gives space to each informant to interpret. In retrospect I understand that it was not the best choice of vocabulary because of its controversy. However, the reference to up-country in the question, I believe, clarified the intent of the question.

Most of the informants understood the question, although the answers were diverse. The meaning of the word traditional is of course very subjective. The informants have different cultural backgrounds; they derive from different parts of the country, belong to different tribes, and have stayed different durations of time in the city and up-country respectively. They are also of different sexes – a factor which might give different experiences about traditions. A big amount of the informants express that up-country inhabitants are more concerned about the environment, mainly because land is an important asset, like we were told in the NEMA (2004) report. People up-country are also believed to use common sense and have an understanding that it is important to live in harmony with the environment. Also a religious perspective to the traditional concern for the environment is added by some of the informants, when saying that the environment is God-given and that alone poses as a reason to care for it (Informant 27).

What is interesting is that a majority of the informants answer the question in a non-personal way i.e. use the words 'them', 'they' and 'people'. Only in rare cases do they refer to themselves as part of the up-country context (Informant 15). It might be the way the question was phrased but this pattern could be a hint to a decontextualisation or disembedding (Giddens 1990: 15, 132f) of the urban citizens and their values, alienating themselves from their rural ties.

A different approach to somebody's perception, besides the basic definitions, is also, to find out their relations to it. This is what question 3 attempts to highlight. In Kenya many people are religious (Internet 14) and all of my informants answered yes to this question. Thus the third question in theme 3 is; "What is the purpose of the environment in your religion?" (3.c.). This question was designed to put question 3.b. in perspective and to see if the answers correlated. Since my experience also was that religion is important to many Nairobi inhabitants, the question was further meant to function as a test to see whether their environmental perception correlates to the proposed one of their religion.

More than one informant refer to God, Genesis or/and the Bible in their answers (Informants 3, 15, 16, 17, 18, 21, 22, 23, 24, 26, 27, 28) and claims the environment to be a God-given resource. The environment is there for the human beings but they in turn have a responsibility to take care of the environment. There seems to be a natural relationship between what has been given by God to uphold human living and the maintaining of that very environment in a direct give and take relationship. Even among the informants who do not refer directly to God, there seems to be an understanding that the environment is there for humans to use and for humans to take care of (Informants 9a, 9b, 11, 15, and 19). The answer: "You have to take care of it and make a livelihood but protect it. But the environment also has

to take care of you." (Informant 15) is a good example of this kind of reasoning. This, to a high extent, regardless of the biblical references, can be seen as an example of paternalism (Pálsson 1996: 67, 69ff).

What should also be noted is that the environment referred to here can be equalized with the concept of nature some of the informants discuss in question A.b (see theme 1 above). There many expressed the perception that environment and nature are parts of the same concept, but that there still is something which differs between the two. Nature is what cannot be altered or tampered with in the environment, while the environment as such also include man-made and altered elements such as houses and fields. When it comes to God, the environment seems to be reflected upon as what we might (in e.g. a Swedish context) refer to as nature, but it is also a part of something bigger. What I also can interpret is that what is referred to, by the informants, as the environment is also God's creation. However, it has somehow been given us the opportunity to alter in the way we (human beings) prefer. There is hence a theoretical division between environment and nature which has religious connections. However, nature is also part of what the informants call the environment, giving that this theoretical division have no or little function in the course of everyday lives. According to Pálsson; "within the moral framework of paternalism, people are aware of the ecological consequences of their actions, and that they seek /.../ balance". This statement is actually very descriptive of the environmental perceptions so far, when summarising the answers to question 3.c and to some of the former questions. The notion of paternalism is again the paradigm that is closest to the informants' answers.

One aspect I wish to highlight is that the answers described above in question 3.c., apply across class boundaries. Not only the poor informants who live in the slums are deeply religious, also well educated informants refer to God as the creator and the importance of religion in their life and perceptions. The ways they express this relationship between God, nature and humankind are different. However, the core is the same; God is the creator, the environment is there for human beings and they in turn have a responsibility to look after the environment.



Street in the Mathare slum, Nairobi



View of the Central Business District, Nairobi

## Analysis of theme 3

#### The divinity in the environment

An equivalent to the paternalistic approach can be found in the pre-Cartesian era of archaism. This was a tradition much emphasised and upheld by the priest Gilbert White and the saint Francis of Assisi (Worster 1996: 29ff). White was permeated both by a love for his environment, but also for the divinity in it. He further cherished the complexity of the ecosystem (Ibid: 32). This man and this tradition managed to blend science and faith in a way I find similar to many of the Nairobi citizens' of today. As stated, the informants more than often referred to God and human beings' responsibility to look after His creation. The divinity is believed to be within, or even embodied in the environment. Christianity has been an integral part (but not the only religious one) of Kenyan society since the 19<sup>th</sup> century colonialism. It has also been adapted to non-Christian beliefs which existed in Kenya before the Christian missionaries arrived (Adekunle 2003: 583ff). My own experience, to add to Adekunle (Ibid: 588) is that religion and Christianity are very important in the lives of many Nairobi citizens. Churches are countless and well-visited to the extent that it has become a profitable business, for good and for bad.

After I visited the slums and Nairobi in general, I can understand that many of its' citizens have a hard time finding the divinity their. A theoretical separation is being made, where environment is the surroundings, and part of God's creation, but nature, is the environment made impossible for humans to alter by God. This is a perception which I find highly interesting and at the core of how the environmental perceptions of Nairobi citizens are founded and developed. The fact that God and religion is very important to the perceptions stands undoubted and I sense a strong affection towards the environment, including nature and vice versa. It is clear that many of the informants believe it to be their purpose to be God's stewardesses on Earth, maintaining the environment He once gave them. Obviously this has proven to be a difficult and a failed project and this must have raised some ambivalent emotions regarding God and the environment. Even so, most of the people turn to God to thank him for the environment and their lives and take that failure on themselves for not having been good protectors.

#### Perception of environmental concern

Not all informants agree that they are more environmentally concerned or aware traditionally or up-country. "It is pathetic. They are known to burn charcoal. And they use this technique where they cut everything down and burn it." (Informant 17). This statement displays a lack of knowledge and understanding to the prerequisites that the rural population live in, and what uses of the environment are harmful and which are not. In Kenya the discourse on environment has a high focus on deforestation and tree-planting (NEMA 2004). Thus the cutting of trees and branches for charcoal is perceived as an enormous problem, although there are other factors which contribute to a much bigger extent to deforestation than personal use. I fear that from the wealthier people of Nairobi there is a misconception that one of the major reasons behind environmental degradation are the rural poor whom cut trees for survival reasons and in lack of options, as described in Guha & Martinez-Alier (2000: 61). Also the hype of agro-forestry that has reached Kenya in the Green Belt Movement<sup>6</sup>, which in itself is a wonderful and important organisation, might have increased the pressure on the people that make a daily use of the forest.

The use of firewood and charcoal, and the preceding unregulated deforestation, is often pointed out as an environmental problem caused by the poor. This both in the general discourse on the subject (Guha & Martinez-Alier 2000: 61, NEMA 2003: 37) and by some of

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<sup>&</sup>lt;sup>6</sup> For more information go to http://www.greenbeltmovement.org/

my informants in Nairobi (Informant 17, App 4). Guha & Martinez-Alier (2000: 61) claim that there is a hierarchy in the use of fuels, where poor people have little possibility to rise in the hierarchy and who on occasion are responsible of cutting down trees and branches for survival. So we can agree with Radetzki (2001: 22) to some extent that people alter their environment to enable survival. What Radetzki (Ibid.) however, does not recognise is that the deforestation caused by the poor in the world depends on factors which are out of their control (Hornborg 2000: 30ff). The pricing for other fuel sources are, for instance, not made by the affected people or in any process they have power in. Oil prices are determined by rich nations, and these nations have very little interest in balancing incomes worldwide, making wealth the environmental polluter in other areas of the world (Guha & Martinez-Alier 2000: 62f). Also deforestation, the ecological economists (Ibid.), point out, is not always caused by the hands of the poor, but more often international logging companies are behind the major cutting of trees in poor countries. There is thus a situation where poor people are not only kept poor, but are also exploited and blamed when the responsibility really lies somewhere else. In extension one could say that wealth in one place causes poverty and environmental degradation someplace else (Hornborg 2001: 30ff, 49ff). In the world of Radetzki that relation would be excused by claiming that it is a strategy of survival for the rich.

Another interesting aspect of the perceived traditional ways with the environment is on the one hand the so called NIMBY-phenomenon (Not In My Back Yard) where one of my informants claim that up-country people are mostly concerned with keeping their immediate space clean but do not care what goes on a few meters away. On the other hand some other informants say that if people up-country could they would take better care of the environment; displaying a more compassionate view on the rural population and the problems which exist up-country. The big diversity in answers, are not only due to the factors which I mentioned above, such as tribe and sex. They are also due to what extent the informants have connections to up-country; e.g. how often they go there, if they have families there and if they are close to their up-country family (Gugler 1996: 234ff).

## Theme four - comparing up-country and urbanity

As already mentioned the concept of up-country is central to many Nairobi citizens (Andreasen 1990: 161). Thus it was natural to ask questions on how my informants described and compared urban Nairobi with rural up-country in more concrete terms. Many people in Nairobi have their extended families up-country, have recently moved to the city and/or quite often go up-country on visits (Ibid: 164f). By asking these questions I also could get an idea to whether if the informants who do not have a strong connection up-country are more integrated in the concept of modernity, than the ones with strong connections. The comparison between up-country and urban Nairobi may be questioned as it represents a type of binary thinking. This is interesting as the bi-polarity of the two is highly theoretical, as elements of the two also exist in the other, respectively, as pointed out by Ericksen (1954: 22). Further are neither urban nor rural communities completely definable in the sense that these as ideals never have existed. This correlates to the theoretical distinctions which are made by the informants between environment, nature and culture as we have seen in earlier themes and in the theoretical chapter.

The first question on up-country-Nairobi relations is; "Can you tell me about the environmental differences between the city and up-country?" (4.a.). It is a very straight forward question but which gives space to the informants to bring up aspects they find particularly relevant. Note that I did not in this particular question ask them to give me their opinions on the different environments.

"Oh, they are different worlds." (Informant 21) is an answer that expresses in one short sentence what the majority of my informants replied. A vast majority of the informants clearly state that there are big environmental and social differences between up-country and the Nairobi. One of the major differences which are mentioned is that of pollution. Up-country is perceived as cleaner than Nairobi in terms of pollution, air, littering, sanitation and traffic. There is also too much noise, emissions, people, houses, stress and industries in Nairobi. These are some examples of a majority of the informants' answers to question 4.a (Informants 9.a., 9.b, 15 - 27).

However, not in everyone's mind pollution and littering come up first. For the informants who live in Kibera, the answers were more related to social factors, convenience and the possibility to earn a living in the city (Informants 3, 4, 5). This is not to say that the perceptions of these informants' daily lives are all positive. On the contrary, informant 3 also complains about their living conditions, implying that things would be better somewhere else, even if I do not think that up-country is an option in this particular case as the woman hade little contact with her relatives. These types of answers I also received in Mathare, where my informants complained about their poor living conditions, but also expressed a need to stay in the city. The people who live in the slums are often the ones with loosest connections and least abilities to travel up-country and are thus probably the Nairobi citizens that have the smallest sample of sentimentality towards up-country. All the Kibera informants were Kikuyus and this could be an additional factor to add to the analysis of their loose connections to up-country. The Kikuyus were deprived of their land during the British colonial rule. Kikuyu land was situated on the high-lands around Nairobi and elsewhere in Kenya, and offered a temperate climate and good conditions for crops and coffee plantations. Not only did the Kikuyus, and Kambas among others, lose their land, they were also forced into employment at the ranches settled on their previous land. Since the foundation of Nairobi many of them have lived there and are thus urbanised since the beginning of the 20<sup>th</sup> century (Gilbert 2002: 119f, 369, Soja 1954: 17ff). These people as well as the newly-migrated people of the slums know what their lives are like. They moved to the city for a reason and they see virtually no turning back. These factors, I believe, must be part of the explanation to why they in such a rational way constitutes that the environment up-country is better but that the social conditions provide a wider range of opportunities (Gugler 1996: 234f).

Also outside the group of poor informants, there were opinions suggesting that upcountry is much nicer in terms of life quality but that Nairobi offers possibilities for a bright future. In the meantime people adapt to their surroundings and circumstances, leaving them little mental choice other than to accept that the city is where they make their living. Economy is generally speaking, one of the top reasons for rural-urban migration. As can be seen in the above-accounted for NEMA report (2004) the urbanisation process is also considered to be of importance to the country and its environmental problems. NEMA (2004: 7f) also acknowledges that the urbanisation process is much due to perceived better life opportunities in the city, However, the possibilities for employment are not always bright, contributing to that some lead very good lives and some do not. The level of informal employment is often controlled by a bigger illegal organisation and not uncommon. Nairobi is no exception, but there the organisation is also dedicated to mafia-like behaviour (Dickenson et al 1996: 206ff, Internet 15)

The second question in theme 4 is somewhat of a trick question in the sense that it tests the earlier given definitions of the environment. It is not meant to in fact trick the informants, more to test them to see if and how they react to the question in this context. "Where do you think you live closer to the environment, in the city or up-country?" (4.b.) is the question

posed. I had expected the majority of the answers to be the similar, but I was pleasantly surprised to find out that there was diversity in the answers.

Up-country is among many of the informants considered to be 'closer to the environment' than the city. The most common reasons for this opinion, expressed by the informants, are that there is more vegetation and trees up-country, as well as cleaner air, the type of environment they like, less buildings, less pollution and because "Nature is more real than in the city." (Informant 25). This is an example of when a person has made a theoretical difference between environment and nature and has applied it to his/hers' perception of two different aspects of reality, i.e. the city and up-country. As seen in the account for the answers to question 4.a. there are perceived differences in the environments and thus it might not be so strange that what the informants earlier on has referred to the God-given environment is perceived as more of a 'real' environment. If that is the case it is quite understandable that the rural environment is perceived as more genuine than the urban.

Not all informants agree on that they are closer to the environment up-country; a significant number of them believe the opposite to be true. Some of the reasons that were given to this answer were; that it is more of an interaction in the city (Informant 23), duration of stay in Nairobi (Informant 14), and because the city is where they live (Informant 9.b.).

The answer: "from the definition...wherever you are there is environment.../.../" (Informant 21) can be looked upon as a summary of what many of the informants expressed. This is a reflexive approach to the interview and what the questions were about, in continuously backing up their own definitions from the beginning of the interview.

The following and third question was partly inspired on the theory of ruralisation, a phenomenon which has been described by Freeman & Norcliffe (1985, Hodder 2000: 89). The subject was highlighted to me as I was told by Mbatha and Agevi that there is some controversy in Nairobi on the keeping of animals within city borders. Posing the question was a way to see if the informants maintain some of the cultivation customs from up-country and if so, why. The third question of theme 4 is: "Do you make any practical use of the environment (here in the city)?" (4.c.) and did not provide the thorough responses that would have been needed to get insight to whether ruralisation is as common as Hodder (2000: 89) suggests. However, the most important aspect I was trying to comprehend, is what the informants categorise as making use of the environment. In my own definition it could mean anything from breathing, littering, eating, growing vegetables and cleaning the streets. The possible cultural and surviving aspects made the question more interesting, but were not the only focus. The aspect of practical use also, says something more about the informants' perceptions.

Even though a majority of the informants answered yes to question 4.c., the reasons for these answers, as with many other questions, varied. To start with the divergent informants, who said no as a response, first of all gave reasons such as; that there is no space to grow or to keep animals (Informants 4, 6), simply said "no" or referred to it as something they do upcountry (Informants 18, 26, 27). Two of these informants came from slum environments where there are scarce resources and very little space to grow anything due to both overcrowding and the fact that the inhabitants do not own their own housing. The third of these informants is a young, wealthy woman who in many ways is the most westernized informant I interviewed (Informant 18).

Some of the informants who answered yes to question 4.c. gave activities such as educating children to become sensitive to the environment, throw litter, composting, grow flowers, play football and participate in garbage collections as examples (e.g. Informants 6.a, 7, 11, 17 22). The variation of activities was thus quite big. One thing that should be noted is that on occasion some informants did not understand the question and asked me to exemplify.

It is thus possible that I sometimes influenced what activities the informants accounted for. As mentioned before, some of the informants were insecure about me interviewing them, questioning my choice to do so, and this feeling, I believe, remained throughout some of the interviews, occasionally causing self-consciousness and insecurity about their own answers.

The reasons behind growing crops or keeping animals varied between contribution to food supplies and incomes to beautification and tradition. It seems that in the slums, when they have a possibility, or wish to have crops or animals, it is because it enables easier survival (Informant 24). In the rest of the city it seems to be more a matter of cultivating because there is opportunity, for beautification and for recreation to some extent (Informants 3, 15, 19, 28). There are of course exceptions to this; informant 9.b. tells me that she grows plants as a supplement to the family earnings. There are thus various reasons for making practical use of the environment within the city of Nairobi. What is actually done is not as important as the fact that the informants view these activities as making practical use of the environment. This, I claim, says something about their relationship to the environment. This relationship seems to range between taking care, using it, exploiting, giving back and cleaning up, that is between all the three, previously accounted for, paradigms of human-environmental relations; orientalism, paternalism and communalism (Pálsson 1996).

The fourth and last specific question in the interview was "Would you prefer to live upcountry?" (4.d.). This question was meant to sum up the theme on up-country versus city life and environment and had the purpose to see if the informants' former answers correlated to their actual wishes.

A majority of the informants were positive in their response and expressed a desire to live outside the city. A small number of them, however, were of the opposite opinion and wanted to stay in the city. It is easy to see these two sides as absolute opposites but I do not believe that to be the case. The informants, who wished to live up-country, were almost unanimous in explaining that their wish was impossible to fulfil. There is a reason to why these people live in urban Nairobi and not up-country. These reasons seem to be mainly financial, including work and housing, access to facilities and transport availabilities, like in almost all cases of urbanisation (Soja 1968: 48, Dickenson et al 1996: 194ff).

Some of the upsides of living up-country are clean air and environment, less pollution, better life expectancies, closer to family, cheaper, less disease, possibility to grow their own food, and that it's less crowded, according to some informants. There are both positive and negative sides to living up-country; that stands undisputed from the answers from both sides. The reasons for not wanting to live up-country are thus the same as the explanations to why it is not possible to live there for the informants that wish to do so. For some the obstacles are in fact obstacles to fulfil a dream, for others a reason to keep away from the troubles and appreciate what they have.

Two of the four informants who do not wish to live up-country are women and they both express a dislike of the amount of manual work one has to do in the rural areas (Informants 4 & 26). Both of these women have quite recently moved to Nairobi and thus have personal experiences from the different types of areas and life. Only one of the informants (Informant 17) who wishes to stay in the city is a man and this, Mbatha explained to me, is dependent on the rural part he and his tribe originate from. The tribe this informant belongs to have traditionally a very poor land where there is very limited access to facilities and that land is scarce and semi-dry. The informant also expected me to confirm that most of my other informants had answered in a similar way, thus assuming that most of my informants are from the same type of up-country. When I told him that my answers were mixed he explained that they (the informants who answered in a different way than him) must

be Kikuyu, as the Kikuyus who were not deprived of their land and/or have political power have access to the fertile highlands of Nairobi (Soja 1968: 24).

This example illustrates that it is likely that many of the answers I got from question 4.d. are dependent on what tribal and cultural background the informants come from and whether an informant has personal experience from living up-country. To visit the rural areas while living in the city is a very different matter than actually residing up-country and should provide very different perceptions of that reality.

Overall I received similar answers, except in some Kibera cases where it was more apparent that the informants had little or no connection to up-country. In Kibera it was also a question of employment, pointing to that these informants lack access to land and housing up-country. This is a fact which has forced them to seek opportunities in the city, even if it means to live in the slum. According to Hjort af Ornäs (1990: 145), the expectations on urban life depends on each individual's reason for coming to town. Some people come to the city to work and send the money to their family up-country. A person who lives under those conditions obviously has a different perception of the urban life than someone who has an extended social network in the city.

What the answers from question 4.d. point to, is that there is a wish to live outside the city, for many, including environmental, reasons where land and clean air are two examples. However, there also is a very practical reason behind the urbanisation and the informants' living situations. There is also an adaptation to the current environment which proves to have many highlights in comparison to the rural life. The fact that the environment up-country is preferred in relations to the city environment is apparent from the answers to the former questions in this theme. However the practical reasons seem to overshadow the wishes. This, I conclude, means that question 4.d. both confirms and questions the indications from the former questions. To live in the city but still grow crops and keep cattle can be a way of maintaining the rural past and to uphold, consciously or unconsciously, a way of life. It can also be a way of contributing to one's survival. The divided opinions on where one is closer to the environment, I believe, are both an expression of paternalism and of an adaptation to the current living environment. The answers to question 4.d. correlate quite well to the answers to question 4.a. where the same type of reasoning of little mental space to include the desired upcountry can be traced. Most of my informants shares a desire to move away from the city, and can to some extent have this desire fulfilled by visiting family up-country or have mentally departed from it. All of the informants understand why they live in the city, i.e. have the same perceptions which leads to a common believe in that this urban life is the only possibility.

#### Analysis of theme 4

#### Modernity in time and space transformation

An interesting aspect is something informant 27 said to me, in response to question 4.a. He says that people in the city are immoral while they are well-behaved up-country. In terms of culture, he presumably means that people up-country have higher moral due to a more well-kept culture, while in the city people are parting from their cultural heritage and becoming more immoral. The theory on being parted from ones cultural heritage correlates to the modernity concept by Giddens (1990).

The modernity theory by Giddens could be considered as the most central one to the line of reasoning in this thesis. Giddens (1990) thorough account for the different components of the highlights and drawbacks of the modern society are relevant to more than one context. Also in developing countries the modernity term is becoming increasingly more relevant, while development is taking place and new types of societies and cities are emerging. I hold the city of Nairobi to be one of these new societies, although the city has existed for approximately one hundred years (Soja 1968: 16f). To move away from a rural context to an

urban environment means to change worlds; beyond a doubt at least the physical surroundings are utterly different.

One of the points that Giddens (1990: 15) makes is about time perception and what modernity have done to time and space. Giddens differentiates between what he calls traditional and modern time perceptions. However, he does not claim them to be totally separable from each other, but part of a bigger process where changes in time and space have occurred. For a long time, time and societal development has been seen from an evolutionary perspective where there are clear continuities between phases. However, the changes that have taken place during the last centuries of such an extent which are incomparable to earlier stages of human existence. The discontinuity which is characteristic to modernity is hidden when looking at history from an evolutionary perspective and thus it is important to view time in a different manner. To say that history is purely evolutional is to say that there is a straight timeline, where human kind started as hunter gatherers, went on to simple forms of agriculture and pastoralism to agrarian and is at the moment crowned by the modern western society. That history is slightly more complex than that, I agree with Giddens (Ibid: 16) on. The hegemonic paradigm status that the evolutionary perspective has gained needs to be interrupted. This does not however necessarily lead to chaos; it simply means that a transformational principle is not applicable to all of history.

A characteristic of the transformation to modernity is the pace in which it has taken place. Also the physical extent to this changed type of civilisation is remarkable as well as the nature of the modern institutions are a characteristic of modernity. One example of the latter is the nation state, an institution which is intimately connected to the modern society and has evolved only in its time. Another example is the city; although it might seem like cities have always shown the same patterns and shared characteristics throughout all civilizations, the modern urbanity is shaped after utterly different principles than the non-modern as described in the introduction to this thesis. The top characteristic of the modern city is that it has emerged in an era of industrialism, but the traits of extensionality and intensionality are also prominent in defining the modern city, as was mentioned in the theoretical chapter on the dynamics of modernity (Knox & Marston 2003: 423f, Giddens 1990: 16f, Macionis & Plummer 2005: 642ff, Atkins et al 1998: 197-210).

#### Production and exoticism

The industrialisation of Sweden and the changing rural-urban patterns might give some insights to the perceived human-environmental relations expressed in theme 4. In Swedish agrarian times the landscape was one of production, and interdependence between nature and the farmers was the key. The verbalisation of the landscape reveals a lot of this interdependency; the Swedish Saami have more than forty words for snow (Frykman & Löfgren 1979: 46). The landscape was magic and inhabited by magical beings which prevented misuse and exploitation of the landscape on which one so clearly was dependent on. When industrialism comes to Sweden all of this changes and the magic is replaced by the rationalism (Giddens 1990: 42ff, Frykman & Löfgren 1979: 50ff). The separation of time and space now starts when means of communication develops, travels increase and production is rationalised and standardised. A distance to nature is developed through industrialisation and urbanisation. This adjustment not only changed the way children learned about nature, but also the way the Swedes came to perceive nature now that it was no longer a daily part of their lives and experiences. Nature is also demystified as the rationality of science replaces it. This made nature a scenery and place for consumption; making nature natural and produced a need to phrase it as such (Frykman & Löfgren 1979: 52f). Nature went from productive landscape to non-productive landscape, making way for a perception of nature as exotic.

#### Nature and non-nature

Löfgren (Frykman & Löfgren 1979: 56f) claims that from this point there is a structural process where an increase in an opposition between what Löfgren refers to as 'nature and non-nature' (natur och onatur, *my translation*). Nature is what is real and untouched in contrast to the urban, created landscape. This notion became popular in the late eighteen hundreds when romanticism coloured society. Nature and the agrarian society were connected and an interest for the old, traditional Sweden rose. This is the same paradox between development and sentimentalism that Giddens (1990: 42f) describes in his discussion about traditions in the modern society. Traditions are upheld, but not for the sake of acknowledging past generations and their knowledge, but for the sake that a tradition should be kept a tradition because it is a tradition.

The longer time goes into the 20<sup>th</sup> century, the more polarised the city and nature becomes; the city represents the dull everyday life, grey and harsh while nature represents summer, recreation and leisure. In essence the two represents different lives where the latter has come to be seen as a way to reconnect to nature. The nature the middle-class lives in during the summer is actually the myth of nature, a romanticised place where one can find oneself. The new Swedish middle-class became fragmented and in this chaos nature became an escape route where a possibility to be complete was to be found (Frykman & Löfgren 1979: 57ff).

To summarise, Löfgren (Frykman & Löfgren 1979: 73), writes that the new perception of nature is a product of societal change where rationalised science and production has taken over time and space, transforming it to linear from cyclic. New dichotomies or antagonisms arose between work and leisure time, home and outside world, nature and non-nature. This change is a complex process and it is important to remember that the way we perceive nature and the agrarian old Sweden is through cultural filters that did not exist at that time.

In comparison to Nairobi, we can see indications from the answers above, that this scenario is both true and false. Since I have not made a comparison between the rural and urban populations of Kenya it is difficult to conclude what the exact differences are. However, we know that an urbanisation has taken place, just like in Sweden and it is the perception of the urban middle class of Sweden in relation to the urban population of Nairobi which is interesting here. It is likely that change has occurred in the way of perceiving nature, as urbanisation in Kenya has taken place, but not always similarly to the case of the Swedes. The Nairobi informants do not make the rural environment exotic; it is more a question of connecting to the environment one actually is in. The rural areas are dominant in Kenya and that might be one explanation for this. Another might be that the rural ties are much closer and very concrete for many urban inhabitants, through their relatives up-country. When it comes to the slum inhabitants who more seldom have a connection of their own up-country, many still themselves have migrated to the city and they also often lack ability to return. The possibility for the Swedish middle class to go rural in the summer must have contributed to their new and awkward relationships with the environment. It seems to me that many of in Nairobi's population instead try to make the most of their current situation.

## Discussion and conclusions

## The poverty trap

On the matter on the links between poverty and environmental degradation one has to conclude that it is a complicated and multifaceted issue. Many poor people worldwide live in degraded environments. So do the people of Nairobi in general and in its slums in particular. Is this a coincidence or a cause and effect relationship? According to Prakash (1997: 1ff) the two factors can be connected in such manner that a degraded environment does not offer much to its inhabitants when no regenerating of biomass and resources take place. Prakash further denies that economists in the like of Radetzki are right in their arguments that short-term economical factors drive poor people to degrade their environment. The theory behind the poverty and environmental degradation links is that poverty leads to a fulfilment of short term needs and is caused by direct resource dependence, as explained in the theory chapter previously in this thesis.

The first factor that Prakash uses to reject that theory is that looking for short-term gains is not exclusive to poor. In fact many businesses and enterprises which operate in environmentally sensitive areas do not consider long-term sustainability issues. The other factor is that much of the short-term thinking that the poor allegedly engage in is due to lack of proper policies and implementations of these (Prakash 1997: 4f). As the people of Nairobi struggle on an every-day basis to maintain a healthy and good environment, they are also restrained to do so by the improper planning and environmental strategies that have characterised Nairobi governing for quite some time (see NEMA 2004). This lack of adequate policies and implementation plans were thoroughly accounted for and analysed in the chapter about the NEMA report and I here refer to that line of reasoning.

The modern phenomenon of risk (Giddens 1990: 36ff) is also present in the relationship between environment and poverty. The risk factor is always present in the life of the poor as these are prone have low resilience due to few options and general difficulties in life. In situations of chaos and shock these people may turn to environmental resources such as tree branches for charcoal and so on. Prakash (1997: 5) further points out that this is a very rare scenario. The shocks and risks are, however, the real reason for environmental degradation. Prakash argues that the short-term thinking of the poor is due to factors of risk and shock. The risk society and risk environments are very much a reality to many Nairobi citizens, as they not only live in a quite criminal city with many social problems, but also in a city where the environmental degradation in places have gone quite far. People in the slums are dependent on the authorities to provide them with proper facilities, i.e. that the systems of expertise work. This is however quite the contrary to the reality that many of these people face, as have been repeated a few times throughout this thesis (c.f. esp. the theory chapter on modernity). If poor people, instead of being constantly blamed for their situation, would be assisted to stabilise their lives, economy and subsistence the risks and shocks would be much less dramatic and environmentally degrading (Prakash 1997: 5ff).

In the case of Nairobi, the current modernistic policies on trash collection are upholding obstacles to the people of Nairobi and its slums. They cannot afford to maintain a clean and healthy environment since that requires an income they do not have. This is the contrary to what the Kenyan government should be doing to its' poor communities. In case after case it is proven, claims Prakash (1997: 6f) that external factors such as bad planning and policies are responsible for the environmental degradation that poor people are being blamed for. The poverty trap is thus not so much about the poor being caught between short term gains and a degraded environment, like Radetzki claims. It is more about the poor being caught between lack of policies, income, high risks and low resilience (Ibid.).

## Discontinuities - NEMA and reality

One could argue that the people of e.g. the Kibera slum, with a population of one million inhabitants, have no one to blame but themselves. Such a great amount of people must be aware that their gathering are causing the environment to degrade, or? According to Prakash (1997: 12) there are no proved links between population density and environmental degradation. Each situation must be evaluated from its social, institutional and geographical context. In an area such as Kibera, which is an urban area and where very little natural resources, or even land, are present, of course the immense population pressurise the environment. However, the people who live there are not being acknowledged as Nairobi citizens, they have no employment and generally very few opportunities in life.

The number one step to improve the environment in the slums of Nairobi would be for NEMA to lobby for these areas to be accepted as residential. No government can close their eyes to the conditions and environments these people live in if they are fully recognised. In the present state it is an easy thing to look away and continue to make circular arguments about the poor not taking care of their environment. The next step after recognising them is to listen to the inhabitants, something which is obviously not done today (e.g. Informant 13). Nobody can make a city totally sustainable; if there would be nothing but cities over the globe it would collapse (Martinez-Alier 2002: 153). However, it is possible to make an urban area liveable and more sustainable. To upgrade the slums of Nairobi would increase the living standard of humans drastically as well as regenerate the environment to a great extent.

As we can see throughout the account for the interviews in this thesis it has become evident that people all over Nairobi, from different backgrounds and conditions are aware and do care about the(ir) environment. The poor are an easy target as they reside in the worst environments, and as long as the rich of Nairobi keep themselves a world apart from the different realities that is Nairobi. Here I am not referring to common people, but to the officials who chooses to legislate without acknowledging that their people have common sense and knowledge of their own lives and environments.



Educational water tank at school in the Korogocho slum

The informants themselves are aware that they have an affect on the environment, although they are not always sure of which activities they engage in are good or bad, all

according to the answers to question 2.c. There is an ambiguity in this that boils down to people being aware and active, participating in clean-ups, tree-planting and so on. At the same time many people in Nairobi perceive themselves as powerless concerning their own environment. This does not mean they have given up. As has been shown in this thesis, they come with suggestions for changes, take on responsibility and express wishes to have a better life and environment. What seems to be holding them back are the fact that the worst degraded environments are not acknowledged as residential areas. The fact is that poor rural-urban immigrants have been left with little choice but to settle there. The other one is the fall-behind in policies and the implementation of these from the governmental and city council's side together with their very modernistic approach to waste management; cash is king. It is obvious to me that the system the Kenyan and Nairobi authorities work according to have failed. Not only in the case of the slums but throughout Nairobi there are problems with e.g. garbage collection and power access. Exactly what this depends on is a very complex matter which has no one simple answer. Kenya is a country that faces a multitude of problems but which also have some great platforms and opportunities for change in the right direction.

The will to change and take part in that change, which I saw in Nairobi, is extraordinary. One of the problems that the present policies and systems for working on environmental problems have is that they misuse those incentives for change. People are trying their best to clean up and plant trees but the ones who are in the biggest need for drastic change are only subject to 'slum upgrading programs' which NEMA (2004: 17) fails to specify and account for. The modernistic approach leaves the concerned people out of the process and I think NEMA would gain bigger successes by including them. One of the problems seems to lie in that NEMA does not appreciate the knowledge base that the people in the slum has. I have shown in this thesis that people from different socio-economic backgrounds and presents are capable to discuss and analyse the environmental situation of Nairobi. Further, and most importantly, they have ideas and intent for changing the environment into something better. It is clear that the modern dichotomy approach is not so relevant to the informants (although they make other distinctions and divisions) and it is not so strange that the modernistic approach has failed in Nairobi. To suggest here all the things that NEMA and the NCC could do to improve the slums is not my place. However, I would like to suggest to them to listen to the Nairobi inhabitants and acknowledge the insights and knowledge they possess regarding the environments they reside in.

## Paternalism à la Nairobi

To conclude the account for the three distinct paradigms on human-environmental relations, (see p 23-24) one could say that the first paradigm of orientalism is one of the absences of human-environmental relations. It denies that there is a connection between the two, and has its origin in Descartes' and Bacon's rationality and enlightenment (Pálsson 1996: 76). It can thus be compared to the dichotomy of nature/culture and is hence the equivalent of the paradigm that stands questioned in this thesis. Also Ingold agrees that the dichotomy separating nature and culture is unfortunate. He claims that this dualist principle must be questioned if we are to get to the bottom of people's perception; culture and nature cannot be divided (Ingold 2000: 9).

The contradictory paradigm of communalism instead characterises the ideal humanenvironmental relationship, hopes for the future and is also a characteristic of many huntergatherer societies worldwide. It is described by Pálsson (1996: 78) as a possible way out of modernity and as an answer to the current environmental problems. Pálsson (Ibid.) further points out that adopting any other paradigm in science and society would be irresponsible.

The paradigm of paternalism is the most interesting to this thesis. It originates from the Enlightenment, Christian values and is common among peasants (Ibid: 71). It could also be

seen as the least controversial of the three paradigms, a sort of golden middle way which is easy to comprehend and agree with. The informants in this thesis continuously refer to God as the creator and speak about human kind's obligation to take care of this creation (see question 2 .b and theme 3). They express awareness of the relationship between human behaviour and environmental consequences, but also on the environment's affect on behaviour and action. What Pálsson mention about paternalism being quite common among peasants and farmers is also interesting in the context, regarding the close connections to up-country that many Nairobi inhabitants hold. However, to make it as simple as to say that Nairobi inhabitants are followers of the paradigm of paternalism would be to simplify matters. As we have seen throughout the text, there are differences among the informants and even a variation between the answers of the same informant. Some have more adapted to the view of separating nature and culture more distinctively, when others lean more towards a totally integrated view on culture and environment; the latter one is however the dominant trend. This shows that the issue is more complex than Ingold (2000: 9) tries to make it. What, however, is interesting is that, in spite of these differences, no informant says that environment, nature and culture are extremely different matters and should be totally separated from one another in order to make sense. That is one of the main reasons I argue that the closest we can come to labelling the perception on human-environmental relations among Nairobi citizens is a form of paternalism.

We must, however, not forget that the informants are not peasants by profession, even if they are at heart (Gugler 1996: 236). The city, Nairobi, is a place quite different from the rural areas, up-country. This must shine through in the answers of my informants, and it does. In theme 4 we learnt about the environmental differences between the city and up-country and about the preference among the informants of these two. It became obvious that many people like the physical environment up-country but the living prerequisites or social environment of the city, regardless of their socio-economic status. According to the definitions, the environment is what surrounds someone (see theme 1). Thus, also the city, as well as the rural, is environment, it all depends on where one is. Even the unaltered God-given nature is environment, as well as the man-made city. The environment is part of nature, as nature is part of the environment. In the lingua franca, Swahili, there exists no word for nature. These factors in combination make the use of the modern division of nature/culture dispensable and unnecessary; it has little meaning and no place in the context of Nairobi citizens.

Up-country is important to many people as they have their 'homes' there. On the other hand they also have their homes in Nairobi. These facts cause the ambivalence of some of the answers. The informants are both involved in an actual relationship with rural Kenya, but are also in an abstract relationship with it, as urban citizens. To go there and visit is not the same thing as to live there; perceptions are bound to change. Since there is no comparison included with rural inhabitants it is difficult to tell how much the informants' perceptions have changed when they have become urban or how much they differ to the rural population. However, as discussed earlier in theme 4, it is obvious that some change take place when a society and its people become increasingly urbanised. What I can conclude is that these changes in perceptions are not equivalent to the ones that took place in industrialising Sweden, (Löfgren & Frykman 1979) although there are similarities.

There are obviously some miscomprehensions about rural life (Informant 17, question 3.b.) but what there are not miscomprehensions about is urban life. Even though quite a few of the informants express a wish to live up-country they are aware that they are in the city for a reason. There is no doubt that they appreciate that reason. When complaints were spoken out in the interviews, they did not refer to the opportunities in the city or their financial status per se. Instead these involved a wish for more trees, the lack of help from the authorities and the fact that they themselves have such little control over their own lives. Of course the poor people wished they could feed their children. Generally, however, they did not distance them

selves from their present environment, but stated their concern, awareness and sense of powerlessness.



Church building in Mathare Valley

## Life in the modern city

So is Nairobi a modern city? Well in many physical respects it is. It is a city of skyscrapers, heavy traffic, industries, nightclubs, cafés, waste baskets, well dressed people and suburbs. It is ruled by capitalism and developmental strategies, it is host to many UN organs, there are white collars and there is an enormous supply of supermarkets and shopping malls. On the other hand many of the suburbs are slums, while others are areas of extreme wealth, it is a city and society of contrasting realities, it is characterised by many people's inability to pay for services, by poverty and unemployment. There are numerous potholes, lack of electricity and water, very little proper sanitation, a failed waste management, immense criminality, and corruption continues to be a big problem. So, sure it is a modern city, a modern nation state, with democratic (?) rule, market-based economy and a growing population. It is a society which is modern on the surface, segregated underneath and both harsh and warm-hearted in reality.

In Nairobi there has been a standardisation of time and thus a transformation of space; a separation of the two. The city has gone towards a system of expertise society where different parties are responsible for different matters and people have been left with little choice but to trust these. Nairobi has many industries and was itself founded only a hundred years ago as a colonial resting place for the Mombasa-Uganda railway (Soja 1968: 16f). The territorial aspects are becoming increasingly important, not only in Nairobi, but nation wise and internationally, a legacy from the scramble for Africa (Dickenson et al 1996: 38, 41, Schraeder 2004: 2f), no doubt. As we can see, many of the qualities of modernity have been filled by the Nairobi society, in accordance to Giddens' (1990) account for these and as been discussed previously in this thesis (c.f. the chapter on theories).

Now that it has been stated that Nairobi has many traits of modernity, what remains to be seen is whether its inhabitants have embraced it. To say that the people of Nairobi are not influenced by these factors mentioned above would be to contradict myself and wrong. There is no doubt that these facts and changes have and are affecting the city's citizens in many ways, just as there is an ongoing exchange between human beings and the physical and social environments. However, it may not have had the affect one would have guessed. To begin with, Nairobi offers many things any European or American city would. It also has many other things to offer. It also offers people who have their hearts and minds up-country and people who are doing the best they can in the given circumstances; often these people are one and the same. Even when they are not, as in many of the slum inhabitant cases, there is a

fantastic will and drive to appreciate what one has. When it comes to what one lacks, people actually try to do something about it. Nairobi can further offer people who dedicate their time and mental space to work towards a better environment and who are aware of that their current environment in which they live is harmful to them. These are people that see the connections between the environmental problems and many of their social problems, but also know that the authorities have failed them. However, the sense is powerlessness but not hopelessness.

## The modernity in Nairobi

Although there are present systems of expertise and that Nairobi is supposed to be a city of modernity, citizens are well aware of that many of these services are not to be trusted upon. One has to rely on personal ties, kinship and the routines of every day life. The slums are not even acknowledged by the Kenyan authorities (NEMA 2004) and thus its inhabitants cannot rely on services; these are as established before, not available to them. The lack of planning, acknowledgement and implementation make the slums into harsh and degraded environments; not the people who live there. Nairobi is what I would call an attempted and failed modernity where the risks out win the trust, where money rules and segregation is a top characteristic.

The greatest difference between the people from different areas is the way they express themselves in terms of perceived ability. The sense of power from each individual do not determine the perception of the environment but the perception of ones ability to be in control of ones life. To not be in control of one's own life is straining, but also a reality for many Nairobi citizens. Yet again, the way the city and its facilities are run have failed the people. In spite of these facts the informants still consider themselves to actively contribute to the environment, both in a positive and a negative way. Of course to admit that one is causing damage to your environment is difficult but the ones who do admit it also recognise why this is so. In the case of the slum inhabitants they do not have much choice but to try to survive.

They do realise that their current way of life is not the preferred one, neither for them personally, nor for the environment they live in. One should not confuse this line of reasoning with an attempt to free the citizens of Nairobi from responsibility to take care of the environment; like all inhabitants of this Earth, they too must contribute (and they do). It is, however, a way of clarifying that the social settings and top-down policies determine the frames for what possible actions could be taken by inhabitants in regards to the physical environment.

Culture and environment are not completely separate - it calls for repetition. Environment and culture are two sides of the same coin, just as modernity and dichotomies are. There are many reasons why the project of modernity has failed Nairobi. It is not relevant, and thus completely inadequate and wrong in the case of the Nairobi context, but it cannot only be blamed on the government. Nairobi as a city may be modern in a semi-western sense, NEMA may have acknowledged the modern notion of sustainable development, but the people have not accepted and embraced this. They might one day, but nothing points to that a change in this direction would be positive for the Nairobi environment even if embracing it would make the modernity attempt to look like less of a failure.

Instead the modernistic notion seems to lead to thinking like Radetzki; in defence of the modernistic life-style and constant strive for economic growth. My belief is not that the Kenyan government consciously tries to blame the poor of Nairobi for the environmental degradation. However, in the attempt to adopt modern traits like sustainable development, economic growth, systems of expertise, money and market based economy while being exposed to a rapid urbanisation which they do not have the resources to deal with; they implicitly do so when not even acknowledging the existence of these worst environments where the poor live. The environments themselves are of course known of, as are its

inhabitants; the slums are continuously referred to as environmental hazardous places. However, the people who live in these areas are denied the rights of the trust in modernity.

## **Environmental insight**

It is innate in the modernistic view and the Cartesian dichotomy to present an objective truth (Hornborg 2001: 158). This thesis rejects this notion, and, as have been seen, promotes the subjective experiences and verbalisations of some Nairobi inhabitants. The material world or environment of Nairobi has been reflected upon and have also been mentally and very much physically integrated in human life and culture on several levels. It is very hard to avoid this integration in environments like Nairobi's, or in any environment for that matter. To think otherwise would be foolish and disregarding of the people who live in it and reflect on it. To have meaningful humanistic and civic sciences and a chance of improved humanenvironmental relations, one must have the subjective notion as a starting point. In this case the human beings. According to Hornborg (2001: 159) ecological knowledge stands at the core of the relationship between subject and object, especially in the discourse of human ecology. I would like to modify his statement, and instead of ecological knowledge use the term 'environmental insight', which to me is the apparent key factor to this thesis. The divide between NEMA and some Nairobi inhabitants also seem to lie in a discontinuity to whether the latter group holds these environmental insights. NEMA (2004, Informant 13) claims that the people of the Nairobi slums are utterly unaware and lack environmental insight. The empirical material which I present displays a different version.

Why is this so then? Well, as argued previously, the modernistic society that Nairobi tries to be, has struck unfortunate against it's' people. Modern phenomena such as money, industrialisation, disembedding, infrastructure, poverty and dualisms have placed the most unfortunate people in harsh positions. They are also continuously blamed for not considering the long-term effects of their actions, for their own poverty, for littering and over-crowding. Although NEMA acknowledges that many of these problems derive from lack of proper policies and implementation of these, the slum inhabitants are still in a very vulnerable position and are not given the chance to be the masters of their destiny and environment.

From theme 2 we learned that a majority of the informants acknowledge their personal responsibility towards the environment. Many also include an extended community. As we saw in theme 1, communities are, according to a number of definitions, closely associated to culture. Thus, people are clearly aware of the relationship between person, culture and the environment. The answers to why people are concerned with environmental issues also displayed a lot of environmental insight. These were in a nutshell "issues of life and death" (Informant 21, question 2.b.) and health was an issue of many informants' concern. One might not think it is strange that people understand that it is dangerous to live on piles of garbage or walk among unfiltered exhaust fumes in heavy traffic. What needs to be pointed out is that in many of these cases people are low educated and that the authorities do no give them the benefit of the doubt. They are thus constantly faced with a distrust from the state, a state which in turn fails them time after another.

The environmental insight also goes beyond recognising cause and effect relationships of health, it also displays the above-mentioned, responsibility and embraces that both humans and the natural (and non-natural) environment are part of the same ecosystem. The point of reference lies in God, and whether one agrees with the strong Christian faith that permeates my informants, it is difficult to disregard its power.

On the one hand, culture is seen as something of the past, and some have even left it behind them (they say); these are the opinions of some slum-inhabitants. However, the very same people still refer to the same notions as the other informants which are the power of God and the responsibility to take care of his creation in exchange for their use of it. In a strange

way, this reasoning makes the people of the slums, the poor, the ones who are not only the victims of the modernistic state, but who also are the most modern of them all. It appears to me that due to the slum-inhabitants' generally weak connections to up-country they are the ones which are the most disembedded. However, their faith in God makes them express the same views of human-environmental relationships as the non-slum inhabitants.

Does this make income-levels the factor which determines the level of human-rural environment relations? Well, only in the case where the modern nature/culture dichotomy is embraced. In this dichotomy the trend is the same as for the development of 'nature' in the Swedish middle class during Sweden's industrialisation (Frykman & Löfgren 1979). In the most common definition made by the Nairobi informants, the environment is what surrounds you (question 1.a.). Thus, the environment is where one is, but also where one is not as surroundings can stretch into infinity. Income determines whether one has access to the non-urban environment and thus the modern feature of money plays a part in straining the possibilities to visit family and friends up-country for many people. However, it does not really bring them any further from the environment, as in the case of the Swedes above. This must also be the reason to why powerlessness and not hopelessness is a present feature in the slums. To give up on the hope of obtaining a healthy, clean environment would be equal to giving up on life.

Some people believe the up-country environment to be more real, because they express that there is more of the God-given environment left. On the other hand they also reminded themselves and me that in accordance to their definitions, question 4.b. is rather silly. Close to the environment - that is where you are. Being insightful people, the informants do see the obvious physical differences between these environments, as well as the cultural. Urban life is obviously different from rural life as the means of subsistence, kinship ties, land, space etc. vary between the two. This is where the abstract or theoretical divisions come in handy. I can agree with that binary models are very useful when it comes to bringing order into the chaos of the world, as well as to make abstract distinctions between things (as brought up in the theoretical chapter on dualisms and dichotomies).

Being born and raised in a modernistic society, and examining a modern dualism, it was hard to ask questions which themselves did not contain them. In asking to compare two environments, I did impose on my informants a way of thinking that may or may not be their own. However, the phrase "Oh, they are different worlds" (Informant 21, question 4.a.) indicate that a dichotomisation or disembedding is present in the minds of some Nairobi citizens. If this was not the case it would surprise me, as urbanisation is a modern phenomenon and thus modernistic thinking is thus bound to effect the people in an urban environment. It is also important to make divisions as they are many times necessary to be able to reflect on separate but connected matters (Ericksen 1954: 23f). There are clear connections between this line of reasoning and the one on the theoretical divisions made between environment and nature by the informants above. To create ideal types or extremes is innate in the comparison process, especially when it comes to matters which share common features (Ibid.). Further, as discussed in the chapter on dualisms and dichotomies above, different types of dichotomies have been and are present in the Kenyan society, for example as in this one; the theoretical division of rural and urban.

The real question lies in if this dichotomisation is relevant to Nairobi inhabitants' human-environmental relationships. Certainly it is not irrelevant, but one should not emphasise it too much as generally the answers are that people recognise physical differences. However, they make no normative judgements about them. It is obvious that any human being would prefer to live in an environment which is not hazardous to their health, but the citizens of Nairobi, both poor and financially stable, recognise the importance of the environment they live in. Somehow they have accepted and embraced their urban environment, even though it

means hardships, but they are constantly working on improving it. Action meets perception again, as the informants perceive their urban surroundings as an environment in which they live, hold responsibility towards and affect on a daily basis, in the same way as the non-urban environment is. They also are convinced that something must be done, and thus try to impose changes to the best of their abilities.

## God, disembedding and rural hearts

The notion of disembedding is important in the context of modernity. The two factors of money and systems of expertise and the use of these, point to that modernity is dominant in Nairobi. However, the question of the connected decontextualisation process remains. The decontextualisation process is very much a part of the phenomenon of disembedding and is the process which takes a human being out of a (traditional/non-modern) context and into modernity with it's systems of expertise and monetary base (Giddens 1990: 132). This is equivalent to the change that takes place when people move from a pre-modern to a modern state of mind (as accounted for on page 26). According to Hornborg (2001: 181) decontextualisation is also intertwined with the dualism and objectification that the Cartesian dichotomy represents;

Decontextualization and objectification can be understood as two sides of the same coin. The decontextualization of social relations, knowledge production and identities can also be expressed as the objectification (and fetishization) of exchange, language and the self. (Hornborg 2001: 181)

My analysis of the state of the Nairobi informants on the issue of their potential decontextualisation is that it is both present and absent. As shown in the thesis, many of the aspects of modernity are present in Nairobi, but people seem to have not fully embraced it. The paternalistic paradigm is objectifying of the environment in some respects, but the informants in this thesis do not completely fit into the picture. The concepts of environment and nature are intertwined with the concepts of God and humans - that is culture - to such an extent, that it is impossible to separate these spheres. Analytically and theoretically it might be useful to have distinctions between environment, nature and culture, for more than one reason as discussed in the previous section of environmental insight. Of course there are differences between nature and culture. That is obvious from the various definitions of these; one has to do with physical surroundings and the other with physical and non-physical actions. However, in the perception of the Nairobi informants these are part of the same sphere in practice. The theoretical frame of the nature/culture dichotomy is not relevant in the same way it has been in a western context, such as in the Swedish example given by Löfgren (Frykman & Löfgren 1979). It seems as nature has not yet been exoticised by Nairobi's inhabitants, as by the Swedish middle class, although it is not part of the same practical sphere to the extent it was when they themselves were rural inhabitants.

The constant connections to up-country is one of the most likely explanations to the lack of exoticism in the perception of the non-urban environment. This relationship is permeated by sincerity and concrete work rather than merely vacation or recreational purposes (except in the case of informant 18). The kinship ties thus are of importance to maintain more integrated human-environmental relationships. The question then arrives at the slum-living people. They generally have much looser connections to up-country, at least physically. Many of them still have wishes and hopes for their lives and future that involve activities characteristic to rural citizens such as, farming, growing, animal-keeping and tree-planting. This is in spite, or maybe because, they have no or little experience of or possibility to act out these wishes. The rural heart is important to the urban body to bring environment and culture closer together.

The faith in God is also a major contributor to these views. The majority of the informants mention God on more than one occasion and the religious aspect of life is important to both slum inhabitants and middle and upper class Nairobi citizens (see theme 3). One could almost refer to God as the glue that sticks environment and culture together for the informants, in combination with the close ties to up-country and the fact that the Nairobi environment is of the type that demands knowledge and action.



'Thank you for not dumping'-sign, Eastlands

#### The relevance of nature/culture?

Environment is what surrounds you, nature is the unaltered, by God given environment, and culture is the way of life. In environment aspects such as lifestyle and socio-economic status were mentioned. Nature was also part of the environment and vice versa. Culture was a community based thing that deals with matters of life, the same matters that are essentials of the environment (c.f. theme 1). This is how the account for the empirical material gathered by interviews start and how they continue through this thesis. The dichotomy of nature/culture proves, over and over again, to not be particularly relevant in the context of Nairobi. The dichotomisation of nature/culture in particular is innate in the modernity phenomenon. This is a project which has been attempted by the Kenyan and Nairobi authorities, which has not only failed but which has not been embraced by its citizens.

The modern notion of sustainable development is not recognised by the masses but a great affection for the environment is expressed and perceived through the love for God and quality of life. The living situations for many people are poor and harsh, and a constant struggle to improve living standards and the environment is ongoing, both mentally and physically. If I would say that no distinctions are being made by Nairobi citizens, between nature/culture, culture/environment, or nature/environment, I would be wrong. The theoretical distinctions must be, and are, made. However, these distinctions and the way they are made are quite different from the ones characteristic in modernity. There is a clear personal connection between the self, your environment and God which indicates that the relationship is much more personal than within modernity. In modernity, as within sustainable development and NEMA, this relationship is abstract and prone to policy making. These are the same policies that make it difficult for the people of Nairobi to take care of their environment. Attempts to do so are even so made everyday and there seems to be a glow in

these attempts, which are quite rare in the modern society of e.g. Sweden. In Nairobi even the poorest people, want to or do take active part in regular clean-ups and tree-plantings in attempts to create a better environment for themselves and others. In the cases where they do not participate it is generally speaking a question of lack of strength and ability.

Of course the survival aspect must come first. Interesting is that the environmental aspect is to urban and poor people in Nairobi, a matter of both short and long term survival. If this is due to a rejection of the modern lifestyle, to a simple adaptation to the present environment or environmental insight, it is difficult to clearly determine, but this thesis points towards that these are all factors. What the environmental concern is clearly not about is income levels, thus punctuating the theories on environmental concern as a matter of wealth. As I possess no figures of the exact incomes of my informants it is difficult to prove that this relationship is completely absent. However, in being the type of research that this is all the empirical material I gathered, including observations, vouches for this.

It seems like the modernity approach by NEMA and its dichotomisation is one of the main reasons to the hazardous and degraded environment of Nairobi. As stated before, all people have a responsibility towards the environment, and all my informants agree. That responsibility is not easy to take on when one is constantly counteracted by top-down rule and disregarded as unaware of the problems that directly affect you. Nobody wants or should live in the environmental conditions of the slums, these are absolutely terrible and who could be more aware of that than the people who live there.

Environmental insight must be recognised as a tool in the strife for a better environment, both socially and physically. Establishing that there is a connection between perception and action, as well as poor policies and implementations, which the latter NEMA (2004: 15, 19, 21) admits. That together with the theory on direct cause-and-effect relations between poverty and environment is proven false; one can only reach the conclusion that the modern approach is wrong and thus irrelevant, in the Nairobi context. These features are all attributes of a modern society, as is disembedding, which are being imposed on the citizens. Paternalism and the faith in God seem to be the adhesive that holds the non-modern human-environmental relations together, with the help of the close ties to up-country. The presence of rurality and religion in the minds of the Nairobi informants are as strong, if not stronger, than the modern urban features of the city and its governing authorities and policies.

In the account for the environmental perceptions of Nairobi citizens I have shown that the modern dichotomy of nature/culture has little relevance. An idea for a different, more efficient approach would be for the Kenyan government, as well as the international community to embrace this. They could further recognise that merely because a city has modern traits it does not mean that its inhabitants benefit from these. Further a general recognition of environmental insight most be regarded as an equally valuable approach as the modernistic. To not embrace modernity does not necessarily mean to be reactionary, it can also be the most realistic option if one can comprehend and acknowledge the human-environmental relations which are relevant to the people in that context. NEMA must begin to take the opinions, views and perceptions of the informants' environment seriously if they ever want to solve the environmental problems in Nairobi. Extended communication, acknowledgements of the slums as residential areas and co-developing participation between Nairobi inhabitants and Kenyan authorities must become reality. Each society and its people deserve to be acknowledged and given the right to themselves define the relations and/or differences between nature, environment and culture. Nairobi is no exception.

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## **Appendixes**

#### 1 - List of informants

The different sections illustrate which interviews were done during the same period of time.

#### Non-slum inhabitants

**Informant 1** – male; 31/1/07 **Informant 2** – male; 31/1/07

**Informant 8** – male; 3/2/07

**Informant 9.a.** - female (couples' interview); 3/2/07 **Informant 9.b.** - male (couples' interview); 2/2/07

**Interview 10 -** mixed genders, group interview, youth-group; 6/2/07

**Informant 11**- male; 8/2/07

**Informant 12**- female, NGO representative, 9/2/07 **Informant 13**- female, NEMA representative; 13/2/07

Informant 14– male; 14/2/07 Informant 15– female; 20/2/07 Informant 16– male; 23/2/07 Informant 17– male; 6/3/07 Informant 18– female; 6/3/07 Informant 20– female; 15/3/07 Informant 21– male; 15/3/07

**Informant 28**– male; 29/3/07

#### Kibera (slum) inhabitants

Informant 3- female; 2/2/07 Informant 4- female; 2/2/07 Informant 5- male; 2/2/07

**Informant 6.a.** - male, (couples' interview); 2/2/07 **Informant 6.b.** - female, (couples' interview); 2/2/07 **Interview 7**- males, group interview, youth group; 2/2/07

#### Mathare/Huruma & Kayole (slum) inhabitants

**Informant 22**– male; 26/3/07 **Informant 23**– female; 26/3/07 **Informant 24**– female; 26/3/07 **Informant 25** – female; 26/3/07 **Informant 26**– female; 26/3/07 **Informant 27**– male; 26/3/07

#### 2 - Questionnaire

## Theme 1- Definitions on environment, nature and culture

**1.a.** How would you define the environment (can you tell me what the word environment means to you)?

**1.b. Can you define nature,** (is it anything different from environment)?

1.c. How would you define culture?

## Theme 2 - Opinions and descriptions of the environment

- 2.a. Who do you think is responsible for keeping your local environment clean?
- **2.b.** Are environmental issues important to you (and if so, why?)
- **2.c.** Do you think that you have any negative or positive affect on the environment (as an individual/in your daily life)?
- 2.d.. Do you ever think about global environmental problems (and if they affect you)?
- 2.e. Do you like your surroundings where you live in Nairobi?

## Theme 3 - religious outlooks on environment, nature and culture

- 3.a. What do you think is your role in the environment as a human being?
- 3.b. What is the traditional way to look at the environment where you come from upcountry?
- 3.c. What is the purpose of the environment in your religion?

## Theme 4 – comparing up-country and urbanity

- 4.a. Can you tell me about the environmental differences between (compare life in) the city and up-country?
- 4.b. Where do you think you live closer to the environment, in the city or up-country?
- 4.c. Do you make any practical use of the environment (in the city (and up-country)?
- 4.d. Would you prefer to live up-country?

#### In addition

5. Is there anything you would like to add that I haven't asked about?

#### 6. Background:

Name:

Age:

Tribe/up-country:

Profession:

Family:

Place where you live in Nairobi:

Years lived in Nairobi:

Connections to up-country:

## 3 – Images and maps



Map of the greater Nairobi-area (Internet 16)



Location of Kenya and its neighbouring countries (Internet 17)



Flag of Kenya (Internet 18)