A LONGITUDINAL STUDY OF BASOTHO CHILDREN: VOLUME I

OFF TO A GOOD START

(A Study of 400 Basotho One Year Olds)

by

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CONTENTS

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AUTHOR'S NOTES

(1) Disclaimer : The views expressed in this report are the author's **own views** and do not necessarily reflect those of the National University of Lesotho (NUL) or of The Institute for Southern African Studies (ISAS) or of The International Development Research Centre (IDRC) or even of the other members of the research team. Whilst I thank all the above bodies and individuals for their great help, it is essential that I exhonerate them from responsibility for any errors which may have crept into the text.

(2) This research was completed with the help of a generous grant from the Institute for Development Research, Canada (IDRC). We are most grateful for this financial help.

(3) The interpretation of Research Results: A difficult problem exists for all writers who have to report research results. This problem is politely referred to as the problem of "interpretation of results", but is often less politely put as, "What **reliance** can we (the readers) place on what you say in this book?" The problem is not new to research reporting. Indeed, it is as old as science itself. Before reading the book, therefore, it may be useful to look very briefly at this problem so that the reader will be aware of what the author is attempting to do in this report.

A simple example of what is involved occured only yesterday, when the author showed his completed chapters to a young Mosotho man. He read the part where it was stated that 70% of babies were born in hospital, and immediately exclaimed, "That cannot be true! My brother is married; he has six children and they were all born in our village, not in hospital." This may be true; his brother's children may indeed have been born in a village, but it also is undeniably true that

70% of our 400 mothers told us that their one year old child had been born in a hospital or clinic. Let us look at this problem more closely.

FACT AND OPINION

Question: "When is a fact not a fact?
Answer: "When it is an opinion.

When we are interpreting research results, facts must never be confused with opinions. At the root of the problem is the fact that the information presented in this book is of two kinds. Both (a) factual and (b) personal comment are presented. Readers may disagree with both kinds, of course, but the kinds of information are very different.

In (a) factual items, such as the number of mothers who had their babies in hospital etc, the reader can disagree only by saying that the mothers told us lies, or the interviewers did not note the answers correctly or, finally, the writer of the report did not add up the scores correctly. All that can be said in this case is that great care was taken by interviewers and in the analysis of results to ensure that what the mothers said was accurately reported. A few mistakes may have crept in (even researchers are human!), but you can rest assured that every effort was made to avoid factual errors.

As to the other kind of information — (b) personal comment; readers have, of course, a God given right to their own opinion and are more than welcome to disagree. Indeed, it is to be hoped that those who disagree will do their own research and collect facts and figures to disprove what has been said in this book. No one would be more pleased than the writer of this report, for it is in this way that the science of Psychology advances.

Research is no substitute for wisdom or insight and millions of facts do not always reveal the truth (indeed, they may sometimes **hide** it). But facts are facts. Whilst opinions can be argued over, **facts** give the essential background for the argument. What we "**think**" is true may not be so.

(4) This book is written especially for **student teachers**, particularly those preparing to be pre-school teachers or primary school teachers.

(5) All names of people used in the text are fictitious, but names of places such as towns or villages or geographic regions are real.

(6) In many places in the text you will see names like this: (Newson, 1984) or (Bam, 1979). This means that the person named has also written about this topic and the date tells you when the work was done. If you are interested in that topic you could turn to the Bibliography, at the back of this book, and find the name of the person (with the date). There you will also see the name of the book or article he or she has written. You will also find the name of the publisher or journal so that you can trace this reference for yourself.

(7) The picture on the front cover was especially created for us by Mrs. Atkins (free of charge). It shows children at the four ages which will be involved in our longitudinal study, i.e. one year old, five year old, ten year old and fifteen year old. Our thanks to Mrs. Atkins for this beautiful illustration.

(8) Although this book gives an account of a research project, it is not written as an academic research report, but as a **textbook** intended for teacher training students. Other research is introduced and material is added which was not part of our research project, in order to give a more rounded view of the topics dealt with.

Arthur Blair 9th June, 1986

PREFACE

On 2nd February, 1984 a child was born in Ha Mphalama, high up in the mountains of Lesotho. Let us call this child Makete (which is not his real name, of course). His mother gave birth to him in her own house, he was her third child, and she was helped by her husband's mother, her sister and a friend.

Makete's mother is fairly poor. Her husband is a miner who returns home infrequently, bringing between M200 and M300 with him each time and sometimes a blanket or two, but this is hardly enough to support the family.

The house in which Makete first saw the light of day is poorly furnished with a bed, a table, two chairs, some shelves on which stand a few plates and cups. It is built in the traditional style, circular in shape with stone walls and a thatched roof. This sturdy little home has crouched for forty years on this small level plateau on the mountainside withstanding hail, rain and snow, and no doubt, it will stand for many another year.

Here then is Makete - a strong healthy little Mosotho infant, wrapped cosily in a colourful blanket, surrounded by his loving family, poised to embark on the journey of life. What will become of him? Who and what will **decide** what becomes of him? These are interesting questions. More than that, they are **important** questions. Will the fact that he was born in a mountain village rather than in Maseru affect his life? Will his family's poverty make any difference to him?These are important questions because on Makete and other infants like him, the future of Lesotho depends.

How can we find the answers to these important questions? One way, would simply be to go around asking people what they think. For example you could go to a woman in the village and ask, "'Me, do you think the fact that a child is born in the mountains rather than in Maseru might affect his life. She might give you her **opinion**. Then you might go and ask someone else and so on. This is quite a good method of finding information about children because the older generation undoubtedly possess a lot of knowledge concerning these matters. On the other hand, this method has one big weakness. It cannot provide information above the level of opinion. To raise understanding above the level of opinion we need **facts.** Of course, all the facts in the world cannot take the place of the wisdom possessed by wise people in our community and a million facts may still not reveal the truth. But, I'm sure you will agree that facts give us something to base our opinions on.

It was to collect **facts** that the study reported in this book was started - facts which would help the community in forming opinions about infants in Lesotho. At the National University in 1981 a member of the Faculty of Education and his students felt that the time had come to collect some facts and figures concerning children in Lesotho today. Our intention was to collect information about babies such as Makete, to see if the important questions mentioned above, and many others, could be answered.

A research project was designed in such a way that we could follow a group of children from their earliest years up to secondary-high school age. In this way we would be able to watch the children grow and could see what happened to them as they got older. This kind of study is called a **longitudinal** study because it follows children for a long time.

To make sure that enough information was collected, a large group of infants - 400 in fact - and their mothers was chosen, and to ensure that we would find out about children in different parts of Lesotho the 400 were chosen from three different geographic areas, as follows:

137 came from villages in Mohale's Hoek District,
135 came from villages in Qacha's Nek district,
128 came from Maseru.

So the children in our sample came from a lowlands-foothills area, a mountains area and an urban area.

The plan was to begin studying these children when they were **one year old** and then follow them up, studying these same children again when they are five, ten and fifteen years old.

This book, as the title tells you, is Volume One of our longitudinal study. It deals with the first age group of children - **one year olds.** It gives the results of the first of our four studys. Other volumes will follow in due course:

Volume 2 will deal with these same 400 children when they have reached the age of five years.
Volume 3 will deal with ten year olds.
Volume 4 will tell us what these 400 children are like when they have reached the age of 15 years.

When all these books are completed we will have in our hands many facts and figures about a typical group of Basotho children. We might then be able to give some kind of answer to the questions raised about the baby Makete at the beginning of this preface. You may remember we asked would the fact that Makete was born in the mountains make any difference to his life? At the end of our longitudinal study, when we have followed Makete and his 399 companions up to the age of fifteen years we should be able to see what has happened to him. We will not merely give an **opinion** but will be able to back our opinion with **facts**. Did Makete eventually go to school, did he pass standard seven; how many in the mountain sample passed standard seven compared to the Maseru group? These, and hundreds of other questions which many people concerned with education would like to know, could be answered.

This book has been written mainly for the benefit of **student teachers**, but others, including parents, qualified teachers, Ministry of Education officials and all those who work with children, may find in it a mine of information. In this way it is hoped that the study will be helpful to many people in Lesotho.

VALUE OF CHILD STUDY TO TEACHERS

Since the book is written especially for student teachers, it may be useful to explain the value of Child Study in education. There is an old saying,

"Before a master can teach his pupils Maths he must not only know Maths, he must also know his pupils."

It is important for teachers to study children, first of all because the child is at the centre of the whole educational system. Teachers, Ministries of Education, administrators, buildings and equipment, all exist so that each child
might grow and develop in mind and body and live a happy, fulfilling life. In going through the process we call 'education', the child will be taught many things. At primary school he will learn how to read, write and count. Later he will study English and Science, History and Geography and so on. Good and useful as all these subjects are, what matters most is not all this information, , but how our children are growing and developing whilst they are learning it. The centre of a teacher's thinking is not the subject he teaches, but the **children** he teaches. Of course, he must have a thorough knowledge of the subject he is teaching. But it is just as vital that he has a thorough knowledge of his pupils.

An understanding of how children grow and learn is of value to teachers, not only in the general way mentioned above, but in some very practical ways which will help their classroom teaching. For example, a knowledge of Child Development will enable the teacher to set her lessons at the right **level** for her pupils. If she has some idea of the stage of learning development her pupils have reached, she will be able to talk in suitable language, organise activities of an appropriate kind and, above all, teach at the correct level of difficulty. Teachers who do not know the intellectual level at which their pupils are operating run the risk of setting work which is either too easy or too hard.

Another practical way in which knowledge of Child Development can assist a teacher is, it can help her choose the right **methods** for her class. Once again, teachers who do not understand Child Development may choose methods which are quite inappropriate for the age group they are teaching. They may, for example, expect a

young class to start taking notes or "compare and contrast" results, or they may try to get older children to act a childish play. If they knew something about Child Development, perhaps these mistakes would be avoided.

WHY STUDY INFANTS

Teachers should study infants because it has been found that, in order to understand children at **any** stage of development, it is necessary to know about their **whole** life experience. We would not expect a man who said he was a 'tree expert' (and such people do exist!) to say, "I only know about 14 year old trees." Surely many of the problems this 'expert' would meet in 14 year old trees would be caused by what had happened to the tree in its 9th or 12th or 13th year. Indeed, as it grows tall and develops more branches, the tree's progress may be influenced by what happened when it was first planted and its first years of growth. In a similar way, a child's growth and development at the present time will be influenced by everything that has happened to him in his life so far. One child may be strong and healthy because he received good food while young. Another child may be weak and feeble because he caught some disease while young and never quite recovered from it.

It would seem to be important therefore, for **all** teachers - even those who teach older children - to know the 'story' of Child Development right from the beginning. We need to know how a child grows in body, mind and personality right from birth so that we know what has happened to our pupils **before they reach the classroom.**

1 THE STUDY

This book gives an account of a study of **400 Basotho one year olds** and their families. It is intended for **student teachers** at the National University of Lesotho and the National Teachers Training College. It may also be found useful by parents; qualified teachers; Ministry of Education officers such as supervisors, inspectors and pre-school coordinators and all those whose work brings them into contact with children.

So that readers can see for themselves **how** and **why** the study was carried out, a very brief summary of our **methodology** will be given in this chapter before we move on to the more interesting results chapters. Readers who are not particularly interested in methodology could jump immediately to Chapter Two.

PREPARATORY WORK

Our thinking about a suitable methodology for this study was shaped by some useful exploratory work carried out in the two years (1981 - 1983) before the study began. This work consisted of making a collection of students' recollections of what it was like to grow up in Lesotho, (Blair & Gay 1981); carrying out hundreds of 'day long' observations with students who recorded what happened to children on any given day from the moment they woke up till they went to bed at night. A cross sectional study of 150 infants was also carried out covering every month of the first year of life. Finally, a small survey of traditional child rearing practices was made by interviewing 36 grandmothers (one of whom claimed to be 126 years old!).

In order to cast the net for ideas as wide as possible, a computer literature search was commissioned from Nottingham University, England, which produced just over 1,000 references. After two criteria were imposed, (a) that they should be concerned with the infancy age group and (b) have either originated in, or be of possible application to, a developing country, the number of remaining relevant references was found to be quite small. It seems not many studies have been carried out with a large sample and a longitudinal design. It is possible, therefore, that the kind of study we are conducting is quite rare and, in Africa, possibly unique.

The literature relevant to our study highlighted the fact that child rearing is an important area of human endeavour, representing as it does the focus of both the major joys and struggles of families all over the world. (Sears, Maccoby and Levin 1957.) It is a dynamic process which begins the instant a child is born, as Skinner suggests:

> "A child is born a member of the human species with a genetic endowment showing many idiosyncratic features, and he begins at once to acquire a repertoire of behaviour under the contingencies of reinforcement to which he is exposed as an individual." (Skinner, 1972)

Each ongoing interaction between a child and his mother, or other primary care giver, can affect not only the child's present behaviour, but his future behaviour as well, (Freud, 1909), although we should note that the effects are probably not irreversible, (Fontana, 1982).

There have been surprisingly few longitudinal studies of child rearing, despite the well recognised importance of this area of research. Although educators, social philosophers and anthropologists have speculated on the kinds of influence that childhood experiences might have on social and ,cognitive development, empirical study of the problem did not begin much before the twentieth century. Gradually, however, in the wake of Wilhelm Wundt's work in Leipzig, and the rise of American Behaviourism, it became recognised that human behaviour could be studied scientifically and that Man was indeed the proper study of mankind. It was not, however, until the early 1950's that child development studies, or Child Psychology, became

widespread, due mainly to the growing popularity of the theories of Jean Piaget, Jerome Bruner and others.

One of the most influential longitudinal studies of child rearing practices was that of Sears, Maccoby and Levin (1957) in America. They studied 379 American mothers and children and sought to establish the most important dimensions of child rearing practices and then to determine to what extent these dimensions were present in the child rearing behaviour of the mothers they interviewed. They found the following dimensions to be most important: (1) Permissiveness - Strictness; (2) General family adjustment; (3) Warmth of mother-child relationship; (4) Particular training methods, rewards and punishments; (5) Tolerance for agressiveness.

The importance of this work for our present research was that it gave rise to a large cross cultural study (Whiting, 1963) in which **six cultures in developing countries** were investigated. The methodology of this great study, however, shows some surprising weaknesses, amongst which are primarily the small number of subjects selected in each of the cultures (ranging from 16 - 24!) and the fact that the behaviours studied could only really be understood within the context of the culture in which the mother and child lived.

Another study of child rearing practices which was influenced by the Sears, Maccoby and Levin work and found relevant to our study, was that of John and Elizabeth Newson in England. In the late fifties they began a study of 700 children and mothers and today they are still following up this sample moving now into the second generation. This classic study has produced a series of important books (Newson 1963,'68,'76).

The interview method used by the Newsons seemed appropriate for our study. The basic tenet of this method is simply **if you want to know something about how mothers raise children, why not ask the mothers?**

Despite the studies reported above, the opinion of K. Zaki Hasan would be echoed by many child psychologists working in developing countries:

> "There is a dearth of valid scientific data
> on essential processes of child rearing
> and child development in third world countries."
>
> (K.Z. Hasan, 1977)

No psychological studies of children have been published in Lesotho, (Ambrose & Willet, 1980). Available at present are some histories of the Basotho people which incidentally mention child rearing practices and some cyclostyled monographs in the archives of the National University of Lesotho, of which the most useful is "Some Aspects of Child Rearing Practices in Lesotho" by E.E. Bam (1969).

This lack of psychological studies in Lesotho hampers planning in early childhood education and leaves a gap in the teacher education programmes, both at the National University and the National Teachers Training College. This is even more lamentable when we consider that a nation's greatest resource is its people. Indeed, the Unesco Notes of October 1979 state unequivocally:

> "No one denies that a nation's most valuable asset is its human resources, whereupon depends the development of all other resources."

Another consequence of the paucity of child development research in Lesotho is that the impact of certain environmental influences on children is not known. Such environmental factors as the socio-economic status of the family, the presence or absence of the father and cultural change must have **some** impact on the growing child. But what kind of impact; do these influence operate for good or ill? At the moment we simply do not know. Of course, many knowledgable Basotho will have their **personal** views on these extremely complex issues and such views are valuable indeed. But personal views alone are probably not a sound enough basis for developing government policies on education. Some solid research is surely required. It was in the hope of providing this much needed background research that the present study was initiated.

OUTLINE OF THE STUDY

Here is a **brief** outline of the study, for those who might wish to replicate our findings or who are engaged in their own research.

(a) **Aims of the Study**: The primary aim was to describe how children are brought up **in their first year of life** in Lesotho today. The secondary aim was to describe some family background and other environmental variables which were thought to have some effect on the infants. These are explained below (see (d) and are discussed more fully in Chapter Two.

(b) **Value of the Study**: It is hoped that the study will provide useful information as the basis of Child Development, Educational Psychology and Pre-School Education courses, both at the University and at the NTTC. The study may also be of value to Ministry of Education officials, especially the new Pre-School coordinator; to teachers; parents; aid agencies such as Unesco and SCF and all those whose work brings them into contact with children.

(c) **Limitations of the Study**: This research project had to contend with several important practical limitations. Because the study was limited to the one year old age group, so the range of child rearing practices studied was also limited. Some familiar topics frequently met in studies of infants are not relevant to one year olds. Weaning and its effects on personality, for example, does not formpart of our study because most of the children were not yet weaned.

(d) **Choice of Variables**: In order to fulfill the secondary aim of the study, which it will be recalled was to describe some family background and other environmental factors which may influence one year olds, it was necessary to choose some **variables**. Consultation with colleagues, plus observation and village work with students, led to the conclusion that the three variables most likely to affect the growing up of a one year old in Lesotho today would be (a) where the family lives, in other words, the geographic position of the family; (b) who the mother is; is she educated, for example, or is she engaged in any responsible employment, etc. and (c) how rich or poor the family may be, in other words, what is called the economic status of the family. Let us look at each of these variables briefly in turn.

(i) **Geographic Position** : Since the late fifties and early sixties, there has been a heightened interest in the relationship between the physical environment and people's behaviour, though long before that the question had interested theologians, philosophers and poets.

Baker (1968) analysed the behaviour of people in natural environments to determine the fit of behaviour-environment relationships. Cultural ecologists in sociology, anthropology and cross-cultural psychology, began to emphasise the role of the physical environment as a powerful determinant of differences in behaviour (reviewed by Altman & Charmers, 1980). Specific aspects of the physical environment were looked at. Sommer (1969), for example, examined the impact of change in the environment on social interaction. Colletta (1977) found that,"geographic isolation leads to apathetic conservatism". Some studieslooked at cultural factors in relation to a variety of environmental behaviours and processes, such as privacy, personal space, territory and crowding.

One interesting aspect of these studies was their interdisciplinary nature. Geographers, architects and urban planners mixed with psychologists and sociologists in trying to work out the problems posed by the physical environment on human behaviour.

One of the most relevant studies in this area was that of John Whiting onthe effects of climate on certain cultural practices. (Whiting, J.W.M., 1964). He mentions that there is a biased geographical distribution of societies in which boys are circumcised. They occur, he claims, more often in tropical than in temperate regions. He argues that the practice of circumcision is related very much to the various sleeping arrangements found over the world and that these arrangements are themselves linked to the winter

temperature in the region in which they occur. He also discusses the question of the relationship between climate and various diseases, and climate and nutrition.

Other studies (Lloyd, 1971; Schiff, 1970; Graves, 1970) make use of the rural-urban dichotomy as one variable amongst others in investigating variations in infant development, almost invariably finding that the 'town elite were ahead of the rural subjects.

In Lesotho there is an obvious contrast between the facilities available to a mother in the town and those existing in a rural village, particularly one up in the high mountains. For this reason, taking geographical location as a variable was felt to be important. We were interested in the possibility that the three very distinctive geographic regions could, either alone or in combination with other variables, produce differences in child rearing practices.

(ii) **Degree of Modernism of the Mother:** Sociologists, political economists, as well as anthropologists and psychologists have attempted definitions of modernism-westernisation-Europeanisation. These studies have been discussed in Inkleys and Smith (1974); Armer (1973); Brislin, Lonner and Thorndike (1973) and Guthrie (1977). Scales have been developed for measuring this concept and these usually make a sharp distinction between the modernism of a society and the individual modernism of any given individual within that society. "Social modernism" has been applied to the complex changes which include the growth of cities, expansion of industries, trade and transportation; multiplication of schools and the development of mass communication media. (Guthrie, 1977)

The definition of "modernism" which was found most appropriate for the present study was that given by Kimmel and Perlman (1970):

> "The modern man (or woman) is one who believes he can control his environment; follows the mass media; is politically and intellectually oriented; is not closely tied to his relatives; has an egalitarian view of family life; values change and punctuality; prefers an urban life. He is open to new experiences and people and respects education and science"

It was accepted by Basotho colleagues that the degree to which mothers were 'modern' in the Kimmel and Perlman (1970) sense was very likely to influence the way they brought up their children. The more 'modern' might be likely to put into practice what they heard concerning child rearing from the clinics or the special programmes put out on Radio Lesotho. The more 'traditional' might be content to follow the grandmother's advice.

The next problem was how to measure this complex variable. Scales mentioned in the literature to measure individual modernity varied in detail, but usually covered areas such as the education level, work (including degree of responsibility), contact with western influences, and openness to new ideas. [IMPORTANT NOTE: It should be carefully noted by all readers that no evaluative judgements are made concerning 'modernism'. **Nowhere in this book is it said that 'modern' is <u>better</u> than 'traditional'**. Let others decide this matter; we are only concerned with describing family backgrounds.]

(iii) **Economic Status of the Family:** The Review of Literature provided evidence that the economic status of a family could affect child rearing practices (Barry, Child & Bacon, 1959). In the West, this variable has been traditionally studied along the lines of social class. Early American studies reviewed by Bronfenbrenner (1958) and research in England by Newson (1963), showed clear social class differences in the way mothers reared their

children. The question of whether the Euro-American concept of social class could be transferred to Africa has been investigated by Sandbrook and Cohen (1975) and Wallis and Weeks (1974). One outcome of these discussions seems to be that countries in Africa differ so much in economic development that no generalisation can be made.

As far as Lesotho is concerned, one could say with a fair degree of certainty that the Euro-American idea of social class does not apply, but that evidently there are vast differences between those who are comparatively wealthy by Lesotho standards and those who are living only a little above survival level. The inclusion of an economic status variable was aimed at finding out the extent to which these economic differences affected child rearing practices.

The definition of economic status used in this study was the measurement of the family's total cash flow and stock assets during the agricultural year preceding the time of the interview.

(e) **Pilot Studies:** Three pilot studies were carried out. The first was a substantial study with a fair sized sample of 64. The other two were much smaller studies (the second had 24 subjects, the third only six) and were aimed at investigating a limited number of problems raised by the first pilot study.

(f) **The Sample:** The characteristics of the sample mothers and their families will be dealt with fully in Chapter 2. Here the questions of how and why this particular sample was chosen will be discussed.

The first problem was which type of sample design to use, in order to avoid bias in selection and produce the greatest amount of precision within the constraints of the limitations mentioned above. At first, much time and effort was spent in a fruitless attempt to draw a strictly random or probability sample using the

list of villages prepared for the 1976 census and the results of a recently completed primary school mapping project (Hartwell, 1982). The idea was to use a school catchment area as the sample unit as this would have advantages in the follow-up phases of the whole longitudinal project. The catchment areas were duly numbered and selected out of a hat, but the villages which emerged were, by some quirk of fate, obviously and undisputedly NOT typical of Lesotho (one was the village outside the University gates, in which almost the entire population worked at the University). It was finally decided to abandon this approach.

After much discussion with colleagues in the Departments of Geography and Statistics, a sample was produced which could be described as **a purposive stratified cluster sample.**

Within the restrictions of time, distance, money and personnel available, the sample was designed to be representative of all the mothers of one year olds in Lesotho, **excluding** those who were not Basotho, those with obvious physical or mental handicaps and those who had not lived in their present location for more than three years. It was estimated by the Bureau of Statistics (1982) that there were between 40,000 and 50,000 one year olds in Lesotho. It was decided that a sample of 400 mothers would be feasible on both theoretical and practical grounds. The number would be large enough to allow for statistical analysis, yet not so large as to be impersonal. With 400 one could still, with an effort, keep the whole sample in mind and even develop some sort of 'feel' for the individual mothers, children and families concerned.

To increase the representativeness of the sample without increasing its size (which we could not afford to do), it was decided to use stratification. In consultation with colleagues, mainly from the Geography Department who had knowledge of the life style of people throughout Lesotho, it was felt that stratification by geographic region was the most reasonable on commonsense grounds, which Moser suggests is a 'fairly safe

procedure' (Moser, 1968). Another important reason why stratification by geographic area was chosen was because it was the only variable of the three for which we knew the exact boundaries. With economic status and modernism the parameters were not known at all.

Within the three strata - **mountains, lowlands-foothills, urban**, - a cluster sample technique was used in which smaller areas within these three large geographic regions were defined by map reference and in which the respondents for each region would be found. The elements of the sample - mother plus child - were selected on a 'snowball system' which will be explained below (see Data Collection Procedure).

Four hundred mothers were chosen from these three areas as follows: 137 were from villages in Mohale's Hoek District; 135 lived in villages in the mountains around Qacha's Nek and 128 came from Maseru. The number of boys and girls in the sample of infants was almost equal, with 198 boys and 202 girls, and their average age was almost exactly 12 months (11.96, to be exact).

(g) Data Collection:

(i) **Instruments Used:** This research was embarked upon with virtually no preconceptions or assumptions. An attempt was made simply to look at child rearing practices and to gain insights which would help to explain how the three variables related to child rearing practices.

It was felt that the Guided Interview type of design was the best available method to allow for this uncluttered look at the sample. So little was known about the variables which might be involved in child rearing that a strict experimental design looking for causal relationships was felt to be premature. Perhaps at some future time a causal approach may be adopted in studies of aspects of child rearing, arising out of the present work, but at the present time a

general fact finding approach was judged more useful.

A 120 item schedule was constructed which was divided into two sections: 80 questions concerned child rearing practices (to collect information related to the primary aim of the study) and 40 concerned family background and other environmental factors (to collect information related to the secondary aim of the study).

All items in the Guided Interview Schedule were checked by one Government and one religious leader to ensure that no questions contravened Basotho custom, or would cause embarrassment.

(ii) **Data Collection Procedure:** The 400 mothers of one year olds were interviewed individually in their own homes by trained Basotho, female interviewers. The interviewers reported that no less than 95% of the mothers were cooperative.

The usual procedure was as follows. First of all, the interviewer would consult the map, each time choosing a different village, so that eventually a fairly even coverage of the whole area was obtained. She carried with her an official letter from the University explaining the project and asking for cooperation. Never on any occasion were our interviewers prevented from interviewing in any village. On entering a village, the interviewer would ask the headman if there were any infants available. Usually one or two mothers of one year olds would be pointed out and these would in turn point out others. This is what we call the '**snowball method**' referred to above (see 'Sample').

The interviewer would approach the first mother, spend some time on introductions, explaining who she was, why she had come and chatting to other women, before asking the mother if she would consent to the interview. Almost all

the mothers agreed to go through the interview. Only in the urban area (Maseru) were refusals encountered.

At the beginning of the interview, the interviewer would show the tape recorder, explain how it worked and why she was using it. She would then explain that no one else would hear what the mother said but herself. Just occasionally, there was a little hesitation at this point and the interviewer would have to spend some time perhaps playing a few words, letting the mother, the children and the grandmother hear their own voices being played back.

Because the questions had been carefully tested in the pilot studies (mentioned above) there were usually no difficulties, either in the content or the wording. About half way through the interview, the interviewer would bring out the food which she had brought to share with the mother. This was one way of showing our gratitude for allowing us to conduct the interview. Some discussion had taken place before the study began as to whether or not we should pay the mothers for letting us interview them. The unanimous opinion of the interviewers was that this might create the wrong kind of atmosphere for the interview. Some mothers, anxious to acquire the money, might deliberately misrepresent the age of their child so that he or she might fit into the required age group for this study. It was felt that it would be easier and more natural to share food with the mothers. The interviewer would spend between 2 and 3 hours on each interview.

In the mountain area the interview procedure was the same as explained above except that the time taken to reach a village was longer because of the mountainous terrain.

Interviewing in the town had rather more problems than in the lowlands-foothills or mountain areas. One difficulty was that most of the mothers were working, hence interviews often had to take place in the evenings. In the town also, more trouble was experienced with the use of our tape

recorders, which are associated in many Maseru people's minds with the police. Using the official map of Maseru, the interviewer tried to spread the sample over the whole town, being careful to include some poorer areas as well as the richer parts and the middle class districts.

In all three geographical areas, the interviewers had strict instructions to explain the **confidential nature** of the interview. This means that mothers were told that, although the information they gave us would of course be used and published, their names would never be known, and no one would know what any individual mother had said.

As soon as possible after the interview was completed, each interviewer would code the answers and transcribe the tape recorded conversation. Thus, for every interview, we had three sources of information, i.e. the completed Guided Interview Schedule; the coded answers and the transcriptions of the tape recording. We thus had at our disposal an enormous amount of information (65,000 items, in fact!).

(h) **Analysis of Results**: Statistical analysis consisted mainly in identifying areas of common practice throughout the three geographic areas. When variation was met, a search was made to identify the variables which might account for the differences.

When the analysis was complete, it was found possible to reach certain conclusions concerning the first year of life of a normal Basotho child, and these will be described in Chapters 2 to 8.

CONCLUSION

That was how we carried out the study. Now let us look at the findings. It will be appreciated that much more information was collected than can possibly be discussed in one small volume such as this. Those interested in this field of research could contact the child psychologist in the Department of Educational Foundations at the National University of Lesotho for further information.

We trust that the chapters which follow will not be a dry academic account of research findings but a lively and interesting discussion of what is happening to one year olds in Lesotho today.

2. 400 FAMILIES

The life of a one year old child is inextricably bound up with that of his family. For this reason, one cannot speak of the life of an infant without reference to the family in which he lives. That is why studies of infants, such as this one, are often considered to be studies of **families**, as much as of children. In this chapter, therefore, some background facts and figures concerning the 400 families in our study will be given. These families form the social context in which the practices of child rearing, which will be discussed in subsequent chapters, take place. The family forms the 'little world' of the infant in which he lives and grows, eats and sleeps, is loved and, in turn, learns to love.

What were our 400 families like? As expected, they varied a lot; some were large, some small; some were more traditional in their way of life, others were more 'modern'; some were rich while some were poor. Let us look at some facts concerning these families.

FAMILY SIZE

Family size is an important issue in Child Development. Some psychologists tell us that the number of siblings (brothers and sisters) a child has can affect his intellectual and social development. It has been suggested also, that the lifestyle of an only child differs markedly from that of a child in a large family. This may seem quite obvious perhaps, but researchers are not agreed as to what effect family size has on the developing infant. (Cicirelli, 1978; Steelman, 1985) One thing is fairly

sure, however, and that is that these effects probably influence **later** childhood rather than the first year of life (Zajonc, 1983). This will therefore be one of the problems for Phases Two and Three of our longitudinal study. For the moment, let us simply consider the family size data as general environmental background information to the lives of our one year olds. Family size in our study is taken to be "the number of individuals who are reported to eat and sleep in the same lapeng".

What size were the families in our sample? The number in each lapeng varied a little according to geographic area. In the mountains, (villages around Qacha's Nek), the average number is 7, which includes mother, father, brothers and sisters and any other people (such as grandmothers). Although 7 was the average number in each lapeng, family composition and household density varied even within this mountain sample. Five of the families had seven children and some had as many as four "other people" living with them. ("Other people" in this context includes anyone who is not mother, father or their children. It usually means grandmothers and grandfathers, but can of course include other relatives).

In the lowlands-foothills, the average number of people in lapeng was 6; slightly less than the mountain sample; but still a good number for the children we were studying to relate to and learn from. Variation here went all the way from one family which had seven children, down to 38 families which had only one child. Numbers of "other people" also varied, from families with only one extra person, (51% of the lowlands-foothills sample) to 21 families which reported having four extra people.

Amongst the urban sample, (Maseru) numbers are slightly smaller. The numbers referred to are those living in one house. Here the average family density was 5. An interesting finding is that this number does not include as many children as in the other two geographic areas. The average number of brothers and sisters which the Maseru sample child has is only 1.6 compared to 2.2 in the lowlands-foothills and 2.4 in the mountains. It seems that, although the town families have less children, they have more "other people". Is this because families from rural areas send children and other relatives to their more prosperous relations in the town?

The picture given by these figures is that most families are relatively small and no longer do we find the large families so common

in the past (Bam, 1969). There are many reasons why family size might decline in any given country (see Todaro, 1980). One reason may be improved health facilities with the consequent improvement in child mortality rates so that parents need not have a large number of children to be sure that some would survive to care for them in their old age. Another reason could be better education of mothers . Migration from rural to urban areas might also affect family size. (This is not the place to go into a lengthy discussion of family size. Readers are referred to the Bureau of Statistics 1976 census publications and to the excellent little monographs, published by the demographic unit at the National University of Lesotho). As far as our present study of one year olds is concerned, we need only note that most of our subjects will have, on the average, five people to relate to, learn from, imitate and to love and be loved by. (We look forward to Phase 3, which will, amongst other things, study the question of sibling size and intellectual development when our sample children will be 10 years old!)

FATHERS AND MOTHERS

Now let us look at some of the facts and figures concerning the most important people in a child's life - his parents. Here are some interesting details.

Ages of Parents: We had a fairly balanced sample as far as age goes, with the majority of mothers (54%) being between **22 and 30 years old**, plus some younger ones (20%) and some older ones (26%) either side. There was no significant difference between geographic areas.

Fathers seem to be slightly older than mothers in our sample. Only 37% were between the ages of 22 and 30 while 61% were above 30. Only 2% of fathers were below 22, compared, as noted above, to 20% of their wives! Does this mean that Basotho girls tend to marry men older than themselves? If so, why? (Think of some reasons why this may be so. Has it anything to do with migrant labour, for example?)

More Traditional or more Modern Parents: In Chapter 1 it was explained that one of the family background environmental variables we would study would be traditional and modern differences. We asked questions to collect information which would help us decide

which of our families came into the "more traditional" category and which into the "more modern" category. Scores from mothers' and fathers' **education level** were also included as were scores from mothers' and fathers' **type of work.** In all, there were 21 items of information, including views and opinions which counted towards the Traditional-Modernism scores. These 21 items were devised by a group of 30 final year undergraduates at the National University as items which would indicate, in present day Lesotho, whether or not a person would be considered more traditional or more modern. Before going any further, let us note two important points:

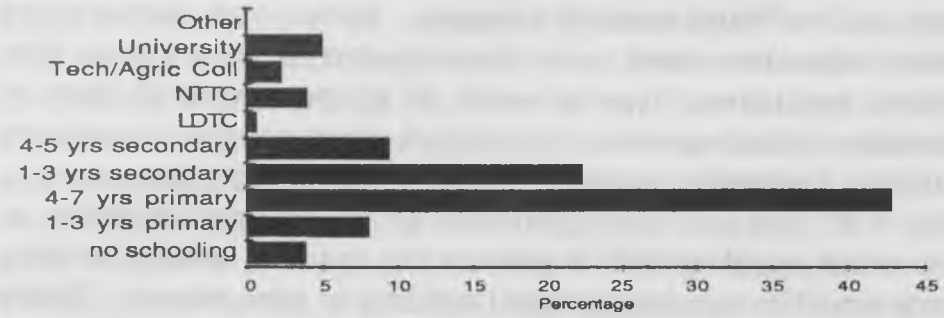
(a) It is **not** being suggested that 'modern' is better than 'traditional'. Such evaluative judgements are not our concern.

(b) Note we speak of **more** modern, or **more** traditional, to show that these are loose categories indicating a general tendency, not rigid divisions.

What was found? First, we will look at some of the important **individual** items which went to make up what was called the **Traditional-Modern Scale.**

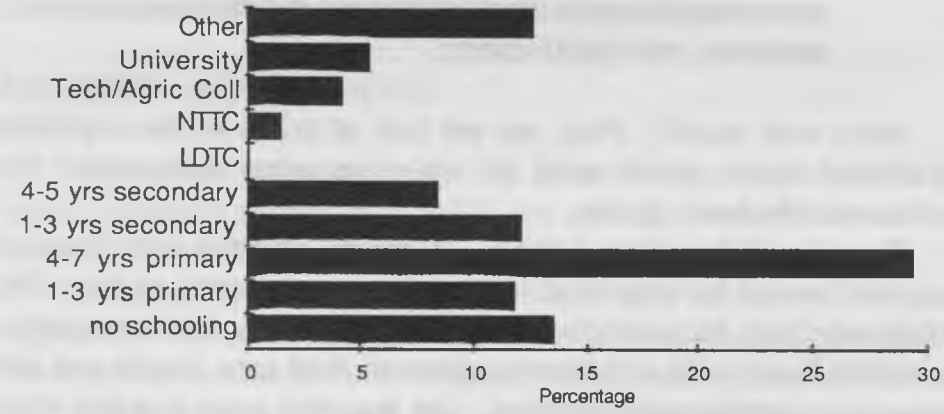
Parents' Education Level: It seems obvious that "level of education" would be important in the whole upbringing of the child. Mothers who had, for example, completed Secondary School might be expected to have more enlightened views on child care, health and diet compared to uneducated mothers. On the next page is a bar chart showing the education levels of our 400 mothers. You will see that a staggering total of 96% of our mothers had some kind of education, even though for just over a half of them, (51%) this was only at primary level. These figures are very high indeed for a developing country, (see Unesco Tables for 1984). These statistics show that, for all but a few children, their mothers would be educated to some extent at least, would probably be literate (again, to some extent) and could be expected to know some of the up-to-date ideas concerning child rearing.

Barchart 1: Education Level of Mothers



It is interesting to compare the mothers' and fathers' education levels.

Barchart 2: Education Level of Fathers



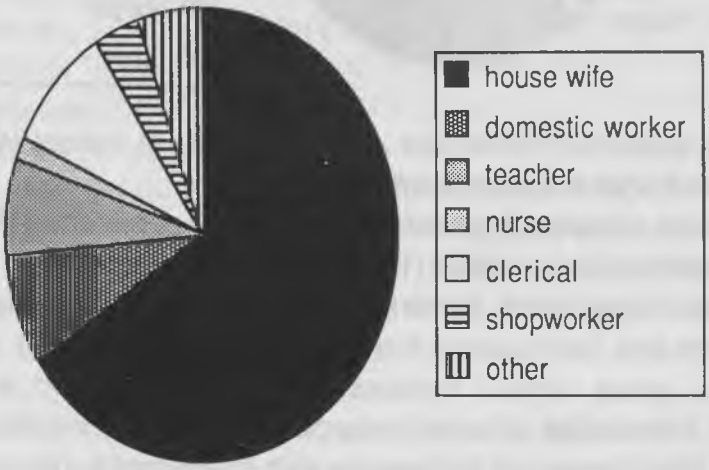
The above chart indicates that there were far more totally uneducated fathers (55) compared to 16 of the mothers in the sample. 42% of fathers had primary education and 32 % had some secondary education - in each case about 10% behind their wives. Lesotho must surely be one of the few countries in Africa in which education of girls outstrips that of boys. But note, at university level, the two groups come together, with mothers' and fathers' totals both standing at 5%.

So, mothers' and fathers' **education levels** were counted as part of the "Scale" which would help us to place families along the modern-traditional continuum.

Parents'Work: Another feature of family life which helped in deciding the Traditional-Modern placement was the work or occupation of the parents. A lawyer might be expected to be a more 'modern' person, in the sense defined in Chapter 1, than say, a traditional farmer - but be careful, it is not necessarily so; that is why **many measures** were used in categorising the sample into 'more traditional - more modern'. One measure alone could be misleading!

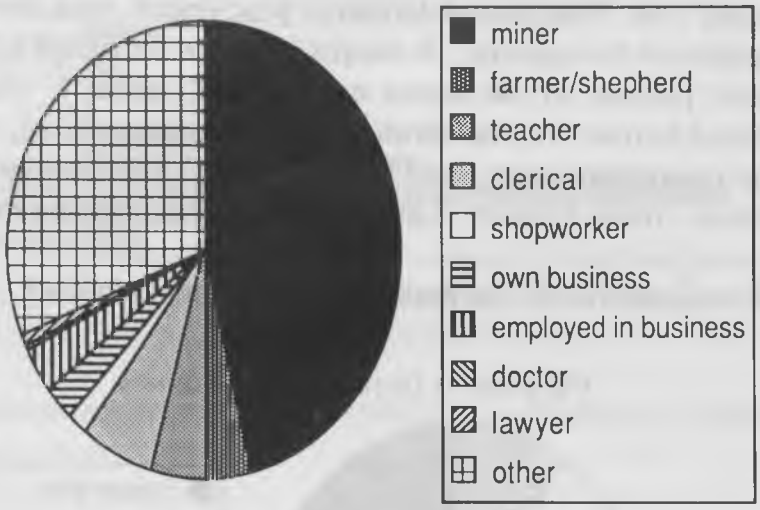
What occupations did the **mothers** in our sample follow?

Pie chart 1: Occupation of Mothers



As expected, most mothers stated that they were housewives (66%), but a sizeable number were in gainful employment (34%), either part time or full time, outside or inside the home.

Pie chart 2: Occupation of Fathers



As expected, there was a large number of miners (46%), only 14 were traditional shepherds-farmers.

There were no professional mothers, but pie chart 2 shows there were 4 professional fathers (1 doctor and 3 lawyers).

Opinions and General Knowledge: One section of our questionnaire (or Guided Interview Schedule) asked the mothers' opinions about various matters, and also attempted to assess her general knowledge of events happening outside Lesotho and outside Africa. The purpose of this section was to attempt to discover - in a very general way - whether the mother tended to be more traditional or modern in her thinking. It will be agreed, I am sure, that these few questions would not be enough to label anyone as definitely 'traditonal' or 'modern'. Of course not. These questions were simply meant to show a 'general tendency' towards one end of the Traditional-Modern continuum, or towards the other.

What were the questions and what were the answers? Here are some examples:

(1) "Do you think our custom of Bohali should be kept, changed or abolished?" Here is what the mothers answered:

Kept	-	291
Changed	-	40
Abolished	-	64
Don't Know	-	5

So it looks as if our sample mothers were definitely in favour of Bohali. What would have happened, we wonder, if the same question had been asked of the fathers? (We leave this to some other researcher to find out. What is **your** guess?).

(2) A question which might distinguish more traditional from more modern people would be to ask, "Did you attend initiation school?" The answer was simple - NO! As many as 378 of our 400 mothers had not been to the initiation school.

(3) We followed (2) by asking, "Would you allow your **children** to go to initiation school?" Opinions were more divided, but still the overwhelming majority (71%) said no, they would not allow their children to do so. Still, 59 mothers (14.8%) said they would allow it, with most adding, "If he or she wanted to". Some mothers, 54 in fact, (13.6%) simply said they had no older children so had not decided yet.

(4) Next we asked a question about what mothers do when they are sick. Would they go to a traditional healer, to a modern doctor or nurse, or both. The answers are enlightening, to say the least! 55% said "modern doctor only", but quite a few - 43% - said they would go to **both** modern and traditional. Only one solitary mother said she would definitely go to the traditional healer **only** and would not go near a modern doctor.

(5) Another kind of 'medical' question was asked next, but this time it was to do with animals: "What would you do if suddenly all your cattle died?" The interviewers coded the answers according to:

(a) A traditional approach: such as going to a witch doctor to find out **who** had made the cattle die,

(b) A more 'modern' approach such as consulting a vet or trying to find out the **cause** of the disease.

Here views were in contrast to those of the previous question: 62% said they would employ a traditional approach to the problem, while only 34% said they would adopt a more modern approach. It would seem that, where humans are concerned, we want to go to the modern doctor but we are not so sure when it comes to our cattle!

(6) Some of our questions attempted to find out if the mothers were open to ideas from the "outside world" through the reading of newspapers and listening to the radio. Surprisingly, perhaps,

most mothers reported that they did **not** read any newspapers (60% and another 27% said they only did so "sometimes". Only 12.5% told us that they regularly read newspapers. It must be remembered naturally, that since the demise of 'The Nation' newspaper, there is little choice as far as newspapers in Lesotho are concerned. Some mothers in the 12.5% who said they read newspapers regularly must have been referring to South African journals. Most mothers however (58%) reported that they listened regularly to the radio (although many said "to music mainly") and a further 32% said they listened to it sometimes. This gives a grand total of 90% who listen, either regularly or sometimes to a radio.

(7) What did they learn about the "outside world" from the radio? (Or from newspapers, for the few who read them). To find out, we asked mothers to name a recent event which had happened in Africa, but **outside** Lesotho. Most mothers said they could not remember hearing of any event (65%). A small number of mothers (16%) could state an event but only very vaguely. Only 79 mothers (19%) could state an event outside Lesotho clearly and accurately. It may be interesting to take a rest for a moment from all these percentages and look at some of the examples of events outside Lesotho but in Africa which these 19% of mothers were able to tell us.

The most frequently mentioned topic, not surprisingly, was apartheid in South Africa. One of the few 'mountain' mothers who could tell us an event said:

> "I remember the killings in South Africa because of the State of Emergency there".

Another mother put it more succinctly:

> "I remember the killings of blacks by the Boers".

For most of the mountain sample however, the interviewers recorded the laconic phrase:

> "Mother could not remember any event".

Amongst the lowlands-foothills sample, events in South Africa were still the most frequently recalled:

> "I remember a mine disaster in South Africa".

It was only from the Maseru sample that a wider range of events in Africa were forthcoming, although even these were linked to the situation in South Africa:

"I recall hearing about the raid by South Africa on ANC in Botswana. I heard that amongst the dead was a Mosotho child aged 6."

And again, more harshly stated:

"ANC massacre by Boers. Some of the people who died there, I know them".

One Maseru mother recalled:

"There is a severe drought in Ethiopia".

(8) When we asked about events **outside** Africa, only 44 mothers (11%) of the whole sample could state one clearly and even these were often linked to Lesotho or Africa as, for example:

"I heard that King Moshoeshoe II visited China and named a Chinese calf Tsameli".

One mother recalled a great sporting event:

"I remember the Olympics in Los Angeles and Zola Budd."

Others recall disasters such as:

"I heard about the Bhopal disaster in India and the death of 2,000 people due to the gas leak."

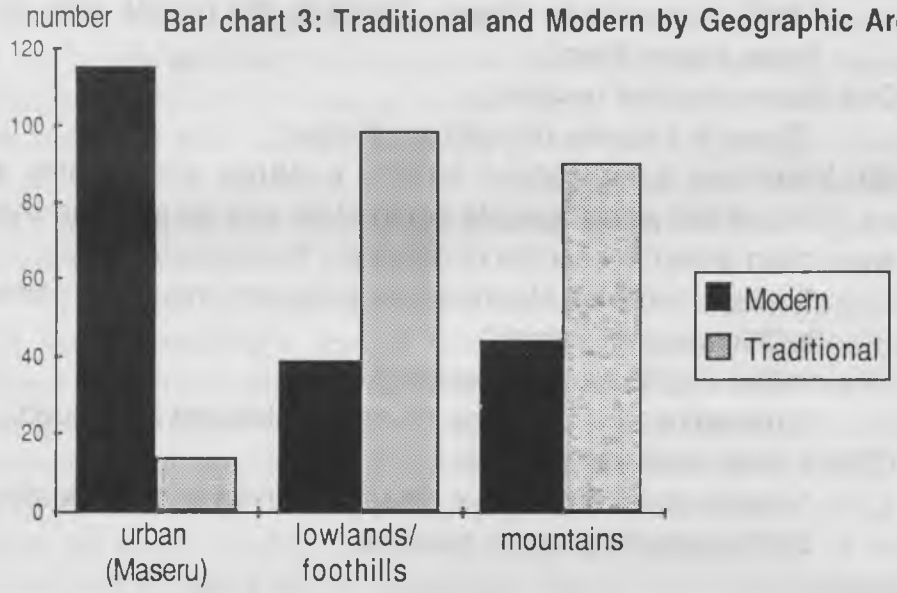
"We were told about the earthquake which killed lot of people in Mexico",

while another remembered a happier event:

"American music stars held a concert to raise funds for African poor such as in Ethiopia."

Conclusion: Perhaps readers might agree that, taken as a whole, the answers to all these questions, plus education level and type of job, could give us some idea (not an exact measure, of course) about how "modern" or how "traditional" the mothers in the sample were. This question was felt to be important because (as explained in Chapter 1) it is possible that the lives of our sample children could be influenced by the modern or traditional attitudes of their mothers. In fact, at the **one year old level**, which the present study deals with, there is not much difference in child rearing between the modern and traditional mothers - as we shall see - but at later stages (Phases 2, 3 and 4 or our longitudinal study) differences will no doubt emerge.

Putting all the above individual items together, we were able to assign mothers to the broad categories: "Seems to be more modern"; "Seems to be more traditional".



Bar chart 3: Traditional and Modern by Geographic Area

RICH AND POOR FAMILIES

Some research results tend to show that the 'economic status' of a family, (i.e. how rich or poor) could be important in Child Development. Not only the social development of the child, but her mental development, could be affected by this variable, although, as with "modernism" the effects might not be seen in the first year of life. These variables may exercise what is called a "sleeper" effect, that is, their influence is not measurable until the child is older. In our sample of families that is exactly what seems to be happening. There is not much difference in the first year of life between infants brought up in richer families or those in poorer homes, but we can guess that as the child gets older the economic status of his family will affect him much more. For example, children from the poorer homes might not go to school because their parents cannot afford school fees. And still later, as teenagers, children from poorer families might suffer because their parents cannot afford nice modern clothes for their sons or daughters.

The teenagers of such families might feel acutely the humiliation of not looking as well dressed as their friends from richer families.

As general background to our 400 families, however, it is still worthwhile to note, briefly, some differences between the rich and poor families in our sample, even though these differences did not seem to affect the first year of life of our infants.

To make a **rough estimate** of which families we would call "upper income families" and which "lower income families", we asked questions concerning the **sources** of wealth in a typical Basotho home.

Here, briefly, are some of our findings:

(a) **Numbers of Fields and Animals:** The vast majority of our 400 families (70%) stated that they possessed NO fields. And almost the same percentage (68%) said they possessed NO animals (excluding chickens, dogs and cats!). Does this surprise you? It would certainly surprise villagers in many other sub-Saharan countries of Africa. They would probably ask, "Then how do you live, without fields to grow your food?" As most readers will know, the answer is that Lesotho, unlike many other African countries, is not really an agricultural country at all. For many years now, Lesotho has not been self supporting in food, as Professor Ambrose states,

> "Lesotho is often described as an agricultural country; a description hardly in accord with the fact that **for many years** more agricultural produce has been imported than exported."
>
> (Ambrose, 1983 - 'Guide to Lesotho')

Amongst the Maseru sample, naturally, 122 out of the 128 had no fields, but even in the lowlands-foothills, amongst those who did have fields, the average number of fields owned was only 1.3 and in the mountains, 1.2. The highest number of fields reported was four (one family in the lowlands-foothills and two in the mountains). On these small number of fields, however, some families managed to rear quite a lot of animals with 29 lowlands-foothills and 25 mountain families reporting that they kept more than eight animals.

(b) **Type of house:** We found that only 31% - less than a third of our sample families - lived in "traditional style" houses, while just over a half (51%) possessed both kinds of house and 18% lived in only a "modern style" house (i.e. square shaped; made of brick with a corrugated iron roof). Even outside Maseru, the trend seems to be to have both kinds of houses. Only within our mountain sample did we find that the majority (62%) still lived in traditional houses.

What did they have in these houses? Of course most houses, although not all, possessed the usual household utensils but to try to distinguish between our upper and lower income families, interviewers noted the possession of some more costly items of property, namely: (i) beds; (ii) T.V.; (iii) A car.

What did we find? Adding up the totals for the whole sample - all 400 families - we found that the **average** number of beds possessed was two, but in the mountain sample, (of 137 families) 11 mothers told the interviewer that they had no beds at all!

Concerning cars and televisions, as you can guess, only a few had either of these luxuries (25 had a television and 53, a car). Almost all the television and car owners were in the Maseru sample; only four families in each of the other two sample areas possessed a television while only 7 lowlands-foothills and 9 mountain families owned a car. (We did not ask whether these mountain cars were roadworthy!)

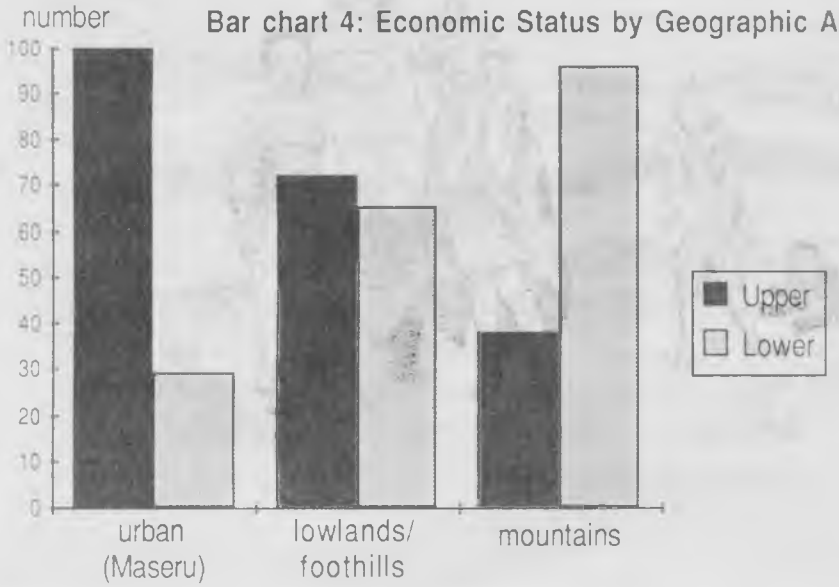
(c) **Cash Flow and Stock Assets:** This was the most important item when considering the economic status of the families. In these totals were included: (1) Contribution of the husband; (2) Mother's wages; (3) Financial contribution of other members of the family and (4) stock units such as a tin roof; brick walls; chairs; tables etc. As was expected, by far the biggest source of income was "Father's contribution" - in some cases this was the **only** source of money. Here the variation between geographic regions was so great that it was decided to use the

principle of "relative poverty" in dividing the families into upper and lower income groups. By this is meant that the division was made **within** each geographic area. We used only two broad divisions in our analysis of economic status, which were, (1) upper income and (2) lower income families. We added up totals from all the sources of income and added stock assets (arbitrarily awarding them M10 each), and then worked out a scale which we called **Economic Status points** (or E.S. points), as follows:

ECONOMIC STATUS POINTS

	Upper Income	Lower Income
Maseru	(1) Above 600 points	(2) Below 600 points
L-F	(3) Above 300 points	(4) Below 300 points
Mountains	(5) Above 200 points	(6) Below 200 points

The bar chart below explains how these divisions worked out geographically:



Bar chart 4: Economic Status by Geographic Area

CONCLUSION

In this chapter, an attempt was made to present some background facts and figures concerning the 400 families in our sample. We trust that the reader will now have a better idea of the "social background" of the infants whose lives are totally enmeshed within these families.

Now let us turn to the infants themselves and begin at the very beginning with our findings concerning the **birth** itself.

3 A CHILD IS BORN

PREPARATIONS FOR BABY'S ARRIVAL

We have all been told about the traditional ways in which our grandmothers prepared themselves for the birth of their children. They would drink "mohlapiso" to help the foetus to grow normally; they were forbidden to prepare any baby clothes, to eat meat off the bone and even to cut their hair! (For an interesting account of these and other traditional child rearing practices, please consult E.E. Bam (1969) . But how do young mothers today prepare themselves? Here are some of the preparations we were told about.

A **modern Maseru** mother. . .

> "I prepared for the birth through reading magazines and all the literature I could get about the birth of a child. I really wanted to know what to expect, but unfortunately the "practical" was very different from the "theory"."

And another **modern Maseru** mother . . .

> "I only read magazines like "Living and Loving" as well as crocheting some garments to save expense."

So, are magazines taking the place of traditional folk-lore?

The most frequent answers concerned attendance at clinics and preparation of baby clothes. A typical answer was. . .

A **lowlands-foothills** mother:

"I used to go to the clinic for regular check-ups.
I also had everything ready for the baby."

And another **lowlands-foothills** mother:

"I used to go to the clinic for check-ups; I bought necessary things for the baby and finally, I cleaned the house, including bedding, in readiness for childbirth."

Sometimes, amongst mothers in the **mountain sample**, we heard an echo of the old traditions, mixed with more up-to-date advice!

"I was advised by the clinic to buy maternity dresses and flat shoes. I also took Sesotho medicine (Lipitsa) to make the birth easier."

Another **mountain mother** simply said . . .

"I took traditional medicine when I was going to give birth. My parents knew I was pregnant then."

To be absolutely certain of having a pleasant pregnancy, some mothers sampled **all** available sources of help including clinic, chemist, traditional doctor and **prayer**! Just occasionally, rather strange preparations were reported which were neither traditional or modern:

"I used to ride trucks to shake my body",

and a seemingly athletic young mother told us:

"Every morning I used to touch the ground with my hands while my feet were on the bed and I would shake my body."

In general then, the trend is moving away from traditional preparations. Grandmother is no longer the sole source of wisdom in these matters but now has to compete with clinic staff and magazines. It does seem that mothers nowadays are preparing for the birth of their babies in quite different ways from their forebears.

THE BIRTH

Traditionally, a mother had her baby at home, either in the village of her mother if it was her first child, or in her own village. She would be helped by her mother and other female relatives and friends. Going to hospital was almost unheard of, partly because hospitals were few and far between, but also because - as E.E. Bam records:

"Mothers-to-be objected to the idea of being handled by young unmarried nurses - 'girls' as they called them. Hospital provides a diet that includes items of food that may be taboo, e.g. eggs. The nurses are unsympathetic to mothers, especially to those young mothers experiencing their first confinements. Hospital staff objected to the use of the traditional ochre and the use of the ox skin maternity garment (worn to keep the foetus warm, especially in thefirst pregnancy). The sterile hospital atmosphere is strange and cold and mothers cannot relax. One informant told me that she failed to understand how delivery can be successful if mothers are forced to lie on their backs - a position which did not seem to provide adequate support and was used in hospitals. It does seem that fear of the hospital medical staff, the birth process and the strange environment all add up to make childbearing in hospital unacceptable."

That was 1968. Have things changed in the last 20 years? To see whether opinions had changed concerning **place of birth**, we asked all mothers the straightforward question, "Where was your baby born?"

Before reading the answers to this question, perhaps you would like to test yourself on your knowledge of present day Basotho child rearing practices. You could do it like this: Imagine you were asked, "If 400 mothers told us **where** their child was born what do you think their answers would be?" Would you guess that these days they would **all** be born in hospital; would you think 90% at least would be born in hospital, or 80% or what? **Guess now!**

To check how well you have guessed, here is what we were told by our 400 mothers:

Born in hospital	-	263 (66%)
Born in clinic	-	15 (4%)
Born in village	-	122 (30%)

Were you right? How close were you? To discover how our findings compared to national figures, we consulted the Bureau of Statistics in Maseru. They had not actually worked out "place of birth" statistics, but they were able to supply us with the number of hospital or clinic births for 1979 and 1980. There were at that time 18 hospitals

(Government and Mission) and 9 clinics. The total number of births in hospitals and clinics throughout Lesotho in 1979 was 17,300 out of an estimated total of live births of 50,735; that is 34%. For 1980 the figure was 24.59% hospital and clinic births. Our figures therefore, are much higher than the National figures for 1979 and 1980. What can account for this discrepancy? One small point is that the number of hospitals has increased to 20, according to the latest list of Health Facilities from the health authorities and there is now the astonishing number of 125 health clinics, although it is not indicated in the document how many of these clinics have labour room facilities. (Document July 85)

What did the mothers **think** about the birth; what was their attitude towards this astonishingly delicate but crucially decisive event in their lives? We asked our 400 mothers about this and the majority (60%) said they enjoyed the event; 11% said it was not too bad, could have been worse and 21% said it was definitely unpleasant. For 8% of cases the interviewers reported it was impossible to assess the mother's attitude.

Here are some slightly out of the ordinary answers which the mothers told us concerning the birth.

A lowland-foothills mother (home birth):

> "My labour pains started when I heard the deafening sound of machine guns when Mr. .....'s house was attacked and burnt down. I guess they were precipitated by that sound. I was too frightened for words."

And a pleasanter experience told by a mountain area mother:

> "I left with my mother to go to the Hermitage clinic, but when we passed Liqalakeng village I felt pains. I could hardly walk to the clinic. We went under a bush where I delivered my baby girl. After that, we returned home carrying the baby."

One Maseru mother confessed...

> "The baby was born out of wedlock. I felt that maybe it was punishment that I deserved because of having indulged in something I was not supposed to. It was so unbearable that I thought maybe God was punishing me for having sinned."

A final beautiful example deserves to be recorded:

> "This baby comes after a stillborn. When my labour pains started I was very much worried lest the same thing happen again. My labour was very much prolonged. I suffered

great pains. At one point I thought I was not going to make it. However, with the child born, all of my fears vanished into thin air and my heart was filled with great joy. After delivery something unusual happened to the child. He was still for long time until the staff-nurse turned the baby upside down and rubbed the soles of his feet. It was only then that this child started to cry. You can't imagine my relief."

We asked **who** was present to help at the birth. Of course, all those (70%) who had their babies in either hospital or clinic replied that only medical staff were present. Of the village births the most usual helpers were, as expected, grandmothers and other female friends and relatives.

Risking ridicule, our fearless interviewers then asked:

"Was your husband present at the birth?"

You can imagine what a surprise this question provoked! And the results?

Husbands present	- 1
Husbands not present	- 399
TOTAL	400

Are there any readers who did not expect this result? We were naturally excited to find out who the exception was; the one and only husband who **was** present at the birth! He was found to be a well-to-do, very modern young man living in Maseru, who had planned very carefully with his wife that they should be together in the labour ward.

Interestingly enough, when we then asked mothers, "Would you have **liked** your husband to have been present?", 35% said they **would** have liked him to be there, if only, as many of them said,

"To see how we women suffer."

The majority (65%), as expected, said they would **not** like their husband to have been present. Some threw up their hands in horror at the very idea:

"Hee; can such a question be asked?"

The most common answer was:

"It is against Basotho custom and is shameful and embarrassing."

Two young ladies, of doubtful reputation, supplied the following interesting answers to the question about husband's presence at the birth:

> "Although I am not married I would have liked **that man** to be there to see what he had done. I was young and he took advantage. I didn't even know that sleeping with him once would lead to pregnancy, so I wish he had been there to rejoice and see what his five Rands had achieved."

and . . .

> "If the **man** who fathered this child had not decided to vanish into thin air the minute he knew I was pregnant I would have liked him to have been present."

Before leaving this section on father's presence at birth, it is interesting to note a cross-cultural comparison. In Europe and America it is becoming common for fathers to be present at the birth. Prince Charles, for example, was with Princess Diana in the labour ward when their children were born.

After the birth, 50% of the mothers spent between a week and one month resting in bed; a further 25% recorded that they had stayed in bed "more than one month". Much to our surprise, the remaining 25% (which is 100 mothers) told us they were up out of bed for a whole day in **less than one week**. 21 mothers said they were up the very next day! When you recall that, in ancient times, mothers were compelled by custom to remain indoors for three whole months after the birth, you can see how things have changed. (More about tradition and change can be found in Chapter 7).

So, the child is safely born either in a big modern hospital in the bustling town of Maseru or, like the child Makete mentioned in our Preface, in a small traditional house clinging to a mountainside in Qacha's Nek. For the first weeks and months he will do little more than eat and sleep. Let us, then, look at these two aspects of the newly born child's life and see how they are dealt with in Lesotho in the 1980's. First of all we will look at **sleeping arrangements** and then, because it is such an important topic, **feeding procedures and nutrition** will be given a whole chapter to themselves (see Chapter 4).

SLEEPING ARRANGEMENTS

In some cultures, such as in many parts of Europe, the arrival of a baby necessitates a reorganisation of the family, often a **complete** reorganisation including the mother's use of her time, work allocated to other members of the family and so on. One of the prime concerns is the **sleeping arrangements** for the baby. Often a whole room is set aside as the 'nursery' (in richer families a woman is especially employed as a nurse or nanny); even in poorer homes, little beds called **cots** are bought and some place in the house is especially set aside as the 'sleeping quarters' of the baby. In Lesotho, as we know, thank goodness everything is much easier! The child just sleeps with the mother. No vast reorganisation of the family takes place. The newly born infant simply becomes part of the household in a very natural manner, quietly, comfortably and securely.

Just to check on baby's sleeping arrangements in Lesotho at the present time, we asked a few questions concerning times and places. To the question, "What do you do when the baby wakes up during the night?", three quarters of our sample (75%) said that the baby did **not** wake up during the night. If the child did wake up, most mothers said they would simply give him the breast in bed (57%), while others resorted to giving the bottle in bed or rocking him on the mother's back.

In contrast to many 'Western' cultures, the lucky Mosotho baby is not left alone in a separate room (or nursery) to sleep; 345 out of 400 mothers reported that when he went to sleep the baby was in the same room with the family.

CARRYING PRACTICES

So the baby enters the household and, for some considerable time, is virtually inseparable from the mother. As we have just noted, at night the infant sleeps with the mother. During the day he is tied to his mother's back a great deal of the time or is within a few metres of her all the time. Although this closeness of child to mother is so much part of Basotho culture - and that of many African, South American and Asian cultures - it should not be taken for granted, nor should the great advantages of these **carrying practices** be overlooked. One obvious

advantage of the way a baby is carried in Basotho customary style is that it gives the infant a feeling of **security**. He is close to the mother (or grandmother, or sister) all the time. (93% of the mothers reported that the child had never been separated from them for more than a day). We might almost say he is as close to the mother in the first nine months after birth as he was during the nine months in the womb, only now he is on the outside at the back whereas then he was on the inside, in the front!

This closeness contrasts greatly with some western cultures in which the baby is wheeled around in a 'pram' (short for perambulator). In a 'pram', the baby does not **feel** the mother's presence in the same way as a baby on a mother's back. Often the baby is facing away from the mother, although with some kinds of 'pram' such as a pushchair, the baby can face the one pushing (usually mother or sister). We may note that a few 'prams' have made an appearance in Maseru, but they are still rare. Prams need smooth surfaces to run on and they cost quite a lot. A question we might ask ourselves is, would we **like** to see the use of the pram spreading in Lesotho? Would it be a step forward - an improvement - or a retrograde step? What do you think? Mothers who have to carry heavy babies on their backs up winding mountain paths might envy their western sisters who possess prams; but which method of transportation, I wonder, would the **baby** prefer?

Another very important advantage of Basotho carrying practices, besides the one discussed above (i.e. **security**), must now be mentioned. This is that a baby on a mother's back is **carried at a good height for looking at his environment** (or surroundings). He is also carried into all kinds of social situations, such as meeting people; going to a shop; in church; at family gatherings; in a taxi. We might say, the baby meets whoever his mother meets. He is also at the right height for hearing **language** being spoken. It may be that these two aspects of Basotho carrying practices: (1) baby is at the right height to see his environment and (2) is carried into many social situations, could have a profound effect on the infant's cognitive, intellectual or mental development, including, especially, his language development. This is an aspect of Child Rearing Practices which requires **further research** urgently.

The present writer carried out a very minor piece of research on carrying practices by making a small cine film of what the baby **sees**

while on the mother's back. The film was made by holding the camera just next to the baby's head and following the mother around wherever she went. The camera was thus seeing **what the baby was seeing**. The baby we followed was one year old and was being carried at a height of exactly 131 cm from the ground. He had a clear view of many objects and people in the village; pots and pans, houses, plants and trees, little children playing in the sand, and when his mother stopped to talk, his ears were very close to the mouths of the speakers. Besides the important advantages of Basotho carrying practices mentioned above, there are two possible disadvantages which would reward further research, and these are that the baby on the back cannot pick objects up from the environment and manipulate them; secondly, the mother doesn't see the baby's face and doesn't talk to him directly while he is on her back.

Another aspect of child rearing which plays a part in the above argument is that Basotho children **walk earlier** than their counterparts in Europe and can therefore **explore** their environment earlier. (We shall return to this point in our final chapter - see Conclusion, Chapter 8).

4 NUTRITION

Whatever other needs an infant may or may not have, everyone agrees that food, and the right kind of food, is essential. That is why, in our survey of 400 mothers and children, we were careful to ask questions about feeding. These question ranged from types of food to times and patterns of feeding, but before giving our actual results, it may be useful to begin with a short background summary of some of the issues concerning "nutrition in the first year of life".

SOME BACKGROUND ISSUES

(a) **Bottle or breast - which is best?**

One issue (or point for discussion) which many readers will be aware of, is the argument about **breast feeding or bottle feeding**. Which is best for the baby? As you know, there are arguments for and against both sides. Some say **bottle feeding** is the best way. It is the new 'modern' way to feed your baby; the milk can be exactly measured and enriched with added vitamins. Moreover, it is quick and easy and much more convenient for the mother, especially if she is working. But the supporters of **breast feeding** point out that breast feeding is the 'natural' way to feed a baby; it is convenient because mothers carry around with them the means to administer this type of food. It

does not cost anything and no special utensils have to be bought. It is also safer than bottle feeding since nipples are easier to keep clean than bottles. Above all, breast feeding gives a baby more than food; it gives him a feeling of security.

So there are arguments on both sides and they are still raging! How have they been answered? Before coming to the answers which our 400 Basotho mothers gave us, perhaps a quick glance at the international scene and the history of the controversy would be of value. Of course, in ancient times breast feeding was the **only** form of infant feeding, it was not until very recently indeed that the alternative method of bottle feeding was introduced. In Europe and America in the 1950's and 60's, breast feeding was discouraged and bottle feeding became almost the normal feeding method. Then in the 1970's, big advertising campaigns began to encourage mothers to return to breast feeding. At that point, many powdered milk firms, seeing their sales in Europe and America slumping, opened up new markets in Africa and South America, by encouraging mothers in those countries to take up bottle feeding. The success of their advertising campaigns is evidenced by the vast numbers of African mothers (mostly the richer, working, educated groups) who took up bottle feeding. I have seen one poster which read "Step into the 21st century - use new formula Vitamilk". So successful were these advertising campaigns, , that the United Nations set up teams to go round Africa to reverse this trend by encouraging mothers to return to the time-honoured method of breast feeding. (A delegation from the U.N., in fact, was in Lesotho earlier this year (1986).

(b) **Malnutrition**

This second background issue is connected with the bottle-breast feeding argument. Much research has been carried out, seeking to answer the question of the connection between **type** of feeding (i.e. bottle or breast) and **malnutrition** (by which is meant protein-energy deficiency in feeding). As we know, the "malnourished child", (That is, the "badly fed" child) does not grow well, is thin and listless. He may even die. If he lives, he may

grow up weak and if the malnutrition occurred in the first few months of life, even the development of his brain may be affected (Scrimshaw, 1970). We might expect that many of the children in Ethiopia, Mali and Chad who, at the present time, are starving, if they survive at all will have impaired brain development - a problem which their **teachers** will eventually have to contend with.

Unfortunately, research usually runs ahead of what mothers actually do. The problems of hunger and malnutrition have been solved in university research projects, yet children continue to starve (Stare, 1984). What **researchers find** and what mothers **do** are very different things. For example, in this argument about bottle versus breast feeding, some large, nationwide studies have shown that the more **bottle** feeding increased, so malnutrition also increased (Plank and Milanesi, 1973). What researchers find probably does not influence what goes into babies' mouths. That depends mainly on **what the mother thinks**. In view of this, it is instructive to hear what our Basotho mothers thought about this bottle-breast business. We asked the straightforward question:

> "Have you any opinions concerning the best way of feeding a baby?"

As you have probably guessed by now, our mothers came down heavily in favour of **breast feeding**, but most also added, "breast followed by bottle is best". Here are some typical answers:

A Maseru (lower income, modern) mother said . . .

> "Breast feeding is good because it is a bonding between mother and child. The milk is readily available; no heating, cooling, or utensils are needed to feed the child. The bottle is never clean enough."

Clinic advice was the basis of another mother's opinion . . .

> "The clinic advises us that breast feeding is best. They say mother's milk is good for baby's growth."

One mountain mother seems to have discovered for herself (or perhaps was told by the clinic) a further important advantage of breast feeding. She said . . .

"Mother's milk is best; it makes a child grow well and be **healthy and not troubled by diseases.**"

Here the mother is stating what much research has found out, that mothers milk gives **immunological protection** to the infant; that is, it contains antibodies which can make the child strong against disease. (Chandra, 1978; Akin, 1981).

Another mother mentions a well known **cultural** aspect of breast feeding and that is, traditionally, sexual intercourse was not supposed to take place while the mother was breast feeding. It was thought, as you know, that intercourse might affect the mother's milk. Indeed, it used to be considered a great disgrace for a mother to become pregnant while still nursing one child (Bam, 1969). In other words, breast feeding acted as a family planning mechanism, serving to **space** the children in a family. One lowland-foothills, traditional mother said:

"Basotho men like my husband still stick to some of the traditional ways, like the belief that family planning is harmful to a woman's health, so the only method that can be used to guard against pregnancy is to breast feed a child."

The question arises, to what extent is the old custom of using breast feeding as a form of family planning, still practised in Lesotho today? This issue did not form part of our study but, luckily I was given a copy of a small study of this question carried out in a village near Mantsonyane by P.G. Blinkhoff in 1984. In essence, this short study suggests that the migrant labour system (which we shall discuss in Chapter 6), plus the problem that husbands might seek sexual satisfaction elsewhere if they cannot get it from their wives, means that more mothers are moving away from the old tradition and are indulging in sexual intercourse while still breast feeding.

Interestingly enough, it is not only Basotho society or even in African societies, that long periods of breast feeding were common, nor is it a modern idea. In a seventeenth century Spanish poem we find:

"Nor from the boy
Withdraw the breast
Till twice the sun
His annual journey round
the globe has run."

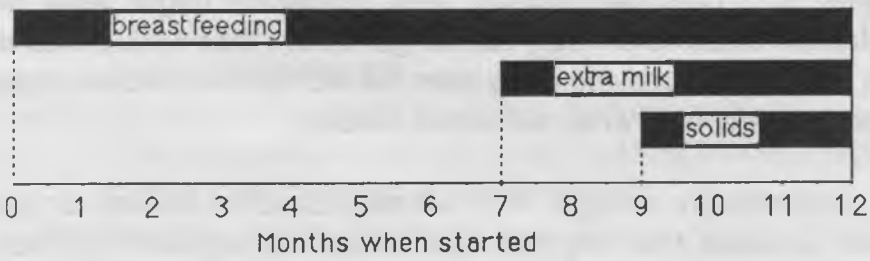
OUR FINDINGS

With all the above background information, let us consider the findings of our study concerning feeding habits or nutrition. We will look, first of all, at (1) Feeding Patterns, and then (2) at some specific measures of nutrition.

(1) **Feeding Patterns**:

How did our 400 mothers feed their babies in the first year of life? In summary we could simply state - what many readers will have expected - that the mothers used **both** methods, (breast and bottle feeding). Although most mothers (84%) were still breastfeeding at the time of the interview (i.e. when the child was a year old) the majority (86%) were also giving "extra milk" as well. ("Extra milk" in our survey means powdered milk given with cup and spoon or cow's milk given in a bottle or cup). Added to these two methods of feeding, mothers reported that they were also giving the baby **solid food**, with 66% starting on solids within six months and the rest starting within nine months. This means, for the vast majority of our 400 one year olds, the pattern of feeding went like this:

Barchart 5: Patterns of Feeding



You will note that, by the end of the first year **all** the infants are receiving **three** types of food - breast milk,other milk and solids - and most had been receiving all of these foods from the sixth month onwards. A rosy picture indeed!

Even in Maseru, much to our surprise, the picture was not significantly different from the mountain or lowland-foothills areas. 74% of the 128 Maseru mothers said they were still breast feeding, "till now", (i.e. the child's first year).

The only noticeable difference was a tendency to start giving "extra milk" **earlier** than in the other two geographic areas. 70% of Maseru mothers had started giving their babies "extra milk" within three months of birth and 80% were giving solids within this same time (three months). This would fit into the pattern which readers will be aware of, in which the working mother breast feeds her baby early in the morning before going to work, then a friend or relative or "nurse girl" gives the baby milk from a bottle or cup and spoon, with some solids and finally the mother again breast feeds when she returns home in the evening.

Now we shall look at the **two specific measures** of nutrition which were used in our study:
(a) The age for height measurement, and
(b) The circumference of upper arm measurement (The Shakir Strip).

(a) **Age for height:** The measurement of nutrition by height for age has been criticised as being not very useful for diagnosing present malnutrition.
This may be true, but in conducting our survey, we were not trying to diagnose anything. We were not nurses in a clinic! We were trying to get a measure of how well a child had been fed **during his first year**. In other words, we wanted a measure of the infant's **past** nutrition. Now age for height is considered by some researchers as "the **most satisfactory indicator** of past nutrition (Mosley and Woodland, 1979).

As, in our research, we were interested in **past** nutrition we chose age for height. Another practical reason why we chose this measure, and did not simply weigh the infants, is because we could find no easy and accurate method of weighing the babies. Our interviewers could not carry accurate weighing machines from village to village and the smaller "spring balance" weighing equipment was not felt to be accurate enough, (Meakins, 1986). It seemed much more convenient as well as better for our purpose, to carry a tape measure!

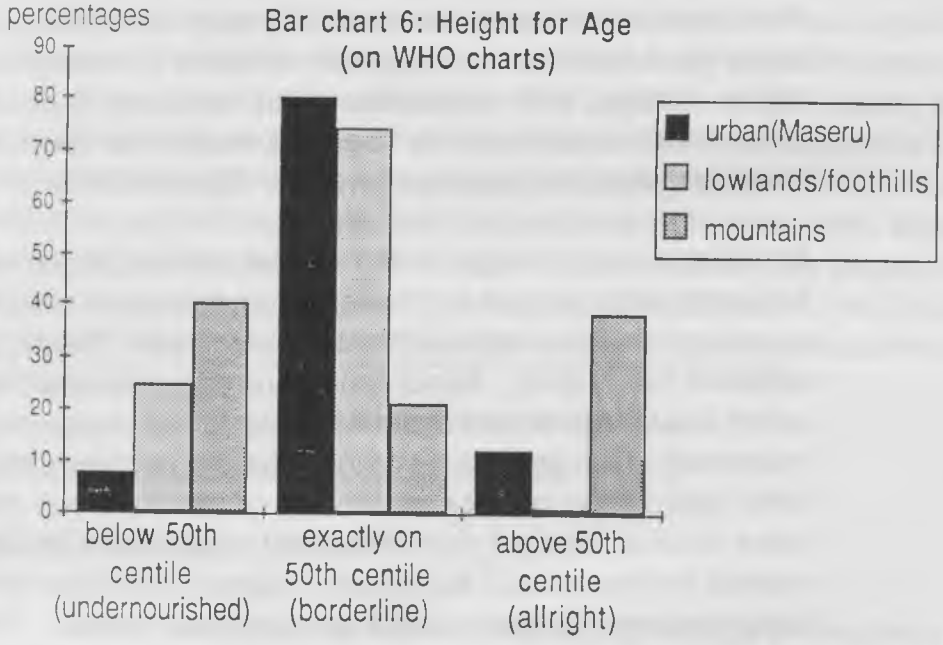
Interviewers measured the child's height or, more accurately, his length, because we measured the infants when they were lying full length on a bed or mat - the measurement known as **'supine length'**. Care had to be taken that the mother laid the baby exactly straight, then the interviewer very carefully measured the child from head to toe with a tape measure.

It is possible to find out how our Basotho sample infants compare with other one year olds in the world by using the Tables produced by the World Health Organisation (WHO) and this is what we did. These "**WHO Tables** " give the height for each age group in "**percentiles**", that is, they give heights for 1% of the sample of a given age, then 2%, 3% and so on. The 50th percentile would be the height which 50% of the WHO sample of that age group had. This 50th percentile is the one we used to compare our sample (from Lesotho) with the WHO sample (made from figures all over the world). We measured **supine length** (as explained above), then noted the child's **age in months** (by referring to the clinic card, birth certificate or mother's report), then looked at the WHO Tables to see if our infant was above, below or exactly on the 50th percentile in height for his age in months. The **age for heights** given by WHO for the three ages we were interested in (remember, our

sample infants were either 11, 12 or 13 **months** old) are as follows:

W.H.O. TABLE OF AGE FOR HEIGHT		
AGE (in months)	HEIGHT (50th Percentile) BOYS	GIRLS
11	75cm	73cm
12	76cm	74cm
13	77cm	75.5cm
	Source: Morley & Woodland, 1979 W.H.O. Geneva 1978 Growth Charts.	

Taking the 50th percentile heights in centrimetres, as given in the above WHO chart, how did our 400 one year olds compare to the WHO sample?



(b) **Upper arm measurement:** This is a measurement of the circumference of the infant's arm at a point half way between her shoulder and her elbow. The measurement must be taken when the child's arm is hanging limp by her side, not bent or holding something.

We chose this measure because it is **easy** and research has shown that it is an excellent indicator of nutritional status. Indeed, one researcher in this field says that this measure alone is almost as useful as most other **pairs** of measurements, like height and weight, (Shakir,1975).

Sometimes a very rough method of the amount of skin on the upper arm is used in clinics, when the nurse simply squeezes the skin and estimates how much "flesh" is between her fingers. About ten years ago a researcher called Shakir developed a simple, easy to use measuring instrument which came to be called "The Shakir Strip". This 'strip' was simply a piece of old film or plastic which the nurse could quickly put round the infant's upper arm. It was marked in three places to indicate children, (a) of the right circumference; (b) those below and (c) those above. The circumference which was right for our one year olds was given as 12.5 cm.

Our interviewer s used a tape measure (the same one they used for measuring height), which is a little more accurate than the simple Shakir Strip. Here are the findings:

TOTAL SAMPLE
Circumference of Upper Arm

Above 12.5 cm = 386 (96.5%)
Below 12.5 cm = 14 (3.5%)

These results are to be expected from what we have said above about feeding patterns. Strangely enough, most of the 14 infants below 12.5 cm were from Maseru; they had **8** below, whereas the mountain sample had **5** and the lowlands-foothills, only **1**.

DISCUSSION OF FINDINGS ON NUTRITION

The difficult question now arises, which of our two specific measures of nutrition - (a) age for height and (b) circumference of upper arm - gives the true picture? One (age for height) shows that most of our sample one year olds are **below** the 50th percentile (i.e. below the average height for their age) according to the WHO Tables, whilst the second measurement (circumference of upper arm), shows a rosy picture of chubby little infants, 96.5% of whom are **above** the 12.5 cm expected measure. To help solve this puzzle, we asked Professor Meakins at the National University of Lesotho, to comment on our findings.

Comment by Professor R.H. Meakins

INTRODUCTORY POINTS

Before I comment on the very interesting findings of this study of 400 Basotho one year olds, I would like to make four important introductory points.

(a) **What is nutrition?** Every living person must eat food which gives him or her all the energy and materials that he or she needs to live a full and normal life. So your food must contain energy in the form of fats and carbohydrates (sugars) as well as protein for growth and repair of tissues. In the food must also be small amounts of substances known as vitamins as well as mineral salts. A well nourished person has a varied diet of carbohydrates - probably in Lesotho in the form of papa (maize meal) together with beans, meat, milk and/or eggs, giving fats, proteins, vitamins and minerals. The addition of fruits and vegetables adds more minerals, vitamins and carbohydrates protecting the body from disease and helping it build a well proportioned individual.

A balanced diet is essential for the natural, healthy growth and maintenance of the body. In children, growth is an essential part of development as failure to grow results firstly in small children, who become weaker and usually die, unless true growth is regained. Likewise a child who is overfed is equally malnourished and is in danger of becoming obese, which can also eventually reduce the child's potential life expectancy (how long he or she will live). Malnutrition means simply Bad Nutrition and is therefore a term used by doctors and scientists to describe both **under**nutrition and **over**nutrition.

To understand what this means and how our needs vary, let us look at the FAO/WHO Daily Food Requirements of Man:

Recommended Daily Intake of Nutrients (FAO/WHO 1974)

Age (years)	Body Weight (Kgs.)	Energy		Protein (grams)	Vitamins A g	D g	B g	Folic Acid g	Calcium (grams.)
Children		Kcal.	MJ.						
0 to 1	7.4	820	3.4	14	300	10.0	0.3	60	0.6
1 to 3	13.4	1 360	5.7	16	250	10.0	0.9	100	0.5
4 to 6	20.	1830	7.6	20	300	10.0	1.5	100	0.5
7 to 9	28.1	2 190	9.2	25	400	2.5	1.5	100	0.5

From **Handbook on Human Nutritional Requirement** published by FAO/WHO (1974).

(b) **How to make certain that your child is well nourished:** The human child before birth is nourished through the placenta inside his mother's body which allows oxygen and nutrients to be carried from his mother's blood into the growing embryo (unborn child). The growing embryo receives a perfectly balanced diet during his nine months life inside the mother, even at the expense of the mother's own body. In some cases, a malnourished mother may cause pre-natal (before birth) malnutrition which results in a condition known as 'neonatal dwarfism' (small children at birth, or just after birth). This neonatal dwarfism is common in Africa and often is compensated for in later life by prolonging the growing time even into the late teens and the early twenties.

After birth, the infant is best fed on demand by the mother with breast milk. Breast feeding of babies has many advantages both to the mother and to the child :

(1) Breast feeding helps build emotional bonds (love) between the mother and her baby.

(2) Breast milk contains a sterile (disease free) balanced liquid diet at the correct temperature on demand.

(3) Breast milk gives the baby protection against many diseases, because it contains materials called 'antibodies' which kill disease-causing bodies known as 'antigens'. It has been recently shown that human milk kills off organisms such as Giardia, a common gut parasite of people in Lesotho causing dysentery, more effectively than the best available drugs!

As the child grows, the demand for food becomes greater and weaning becomes necessary. At this time it is important that the child is introduced to simple foods, as well as being still breast fed. The human body needs to change its diet from liquids to solids but needs time to be able to learn to chew, ingest, (eat) and digest solids. So the first foods should be a mixture of semi-liquids produced by mashing up papa with milk, or eggs, or vegetables.The child has to grow his teeth so cannot in the beginning break up hard foods before swallowing it.

(c) **What is undernutrition and how is it measured?** Undernutrition normally occurs for two reasons:

(1) The individual does not receive enough food - this results in general loss of weight known as 'Marasmus'.

(2) The individual has a diet lacking a specific necessary material. The deficiency of protein results in undernutrition, though not necessarily loss of weight, known as 'Kwashiorkor', which if prolonged will be fatal. Other deficiencies of diet such as certain vitamins will result in an inability to see at night, a loss of skin texture, or a reduction in the body's ability to fight disease.

(d)**Three methods normally used to determine nutritional status of individuals:** (though in some rare cases special immunological and biochemical techniques may be used in specialized hospitals). These are:

(1) **Height for Age**, which is regarded as the best method of establishing general nutrition status over a long period of time.

(2) **Weight for Age,** which is like height for age, but is more rapidly variable and can easily be distorted.

(3) **Mid Arm Circumference,** (Shakir Strip) which measures the amount of tissue present and is a measure of current nutritional status without the daily variations found in Weight measurements.

COMMENT ON THE STUDY OF 400 BASOTHO INFANTS

The present study is very interesting and shows us a number of important features about young children in Lesotho. The two nutritional assessments made were Height for Age using the WHO standards and the Mid Arm Circumference using the Shakir Strip method.

The **results** were as follows:

Height for Age of Lesotho Children

Nutritional Status	Maseru	Lowlands	Mountains
Above 50th Centile (OK)	15 (11.9%)	1 (0.7%)	52 (38.5%)
50th Centile (borderline)	101 (80.1%)	102 (74.4%)	29 (21.4%)
Below (undernourished)	10 (7.9%)	34 (24.8%)	54 (40.1%)

Shakir Strip (Mid Arm Circumference) for Lesotho Children

Nutritional Status	Maseru	Lowlands	Mountains
Above Mean Val ue	119 (93.7%)	135 (99.2%)	130 (96.2%)
Below Mean Value	8(6.2%)	1 (0.7%)	5 (3.7%)

The Height attained by an individual is an interaction between the amout and quality of food eaten during their life and their genetically determined height potential. So in any given society there will be a wide variation in the height of an individual when fully grown, though this is

not at all marked in young children who all seem to have similar heights for age when fed on the same food. So, Height for Age can be considered to be an indication of nutritional **experience** rather than current nutritional status. Using the guideline that on the 50th Centile the children are at risk of being undernourished, we find that, of the children sampled, 88% from Maseru are at risk while in the lowlands, 99.2% are at risk compared with only 61.5% in the mountains.

Serious malnourishment (Marasmus) appears from the survey to occur in the children sampled at the rate of 7.9% in Maseru, 24.8% in the lowlands and rising to 40.1% in the mountains. Two clear deductions can be made, firstly that during pregnancy or early childhood, many of these children did not receive adequate nutrition and secondly, that serious undernutrition is more common among the rural population than among the urban population.

Mid Arm Circumference (Shakir Strip):

The measurement of the mid arm circumference is a reliable method of determining **current** nutritional status. So, where Height for Age shows us the nutritional **experience** during the past year, the Shakir Strip shows us the condition of the body **at the time of measurement.** The results obtained in this survey show that 6.2% of the children examined in Maseru were then undernourished compared with 0.7% in the lowlands and 3.7% in the moutains. This shows that, at 1 year of age, undernourished children are 7 times more common in Maseru than in the lowlands and 2 times more common in Maseru than in the mountains.

GENERAL CONCLUSIONS:

I feel that the following conclusions are justified by the data from this study of 400 Basotho one year olds:

(1) There are more well nourished children in the mountains than in the other two geographical areas in Lesotho. This is shown by 38.5% being above the 50th Centile on the Height for Age scale and 96.2%being above the Mean for the Shakir Strip.

(2) The percentages of children at the age of one year at risk is low, even when at the highest rate of 6.2% in Maseru.

(3) The number of children experiencing some form of nutritional deprivation during the last three months of pregnancy (3 months **before** birth) and the first year of life, is high. However, the number of children showing long term serious undernutrition is low in Maseru though high in the mountains (40.1%).

DEDUCTIONS

The above facts make certain deductions important. They can be listed:

(1) All children sampled were still receiving mother's breast milk to some extent, some on demand and some at morning and at night. Thus this sample excludes mothers who cannot produce milk to feed their babies together with those who do not because of their own wishes or restricted access because of work regulations etc. Thus there are many children still endangered by nutrtional deprivation not included in the survey.

(2) The high rates of long term undernutrition may represent either nutritional dwarfism due to pre-natal undernutrition which is common in Africa, or to food shortages during early childhood.

In Tanzania at Muhimbili during 1974-76, Meakins and Harland reported considerable levels of neonatal dwarfs as often beautiful children with well proportioned bodies who were small at birth and often remained small during their youth. In this case, neonatal dwarfism was caused by the effects of maternal nutritional deprivation resulting from both food limitation and due to social customs. Like Tanzania, Lesotho has recently undergone seasonal food deprivation due to failures of reliable rains reducing crop production together with the lack of availability of food reserves, especially in the mountains.

(3) **The relatively low rates of seriously undernourished children as shown by the Shakir Strip Method indicate**

that the majority of the children in Lesotho at one year old are well nourished, which is high compared with many other countries. One reason for this high result may be the fact that the mothers are still feeding their children themselves, whilst elsewhere at this age, they would have been fed solely on semi-solids.

(4) It would be of value to compare the height-weight for age ratio together with the Shakir Strip value of these children again after a year. If this was done, we would have more concrete evidence that we have neonatal dwarfism, a condition which is always highly controversial but important.

(Dr. Meakins is Professor of Biology and Head of the Biology Department at the National University of Lesotho).

5 EARLY SOCIALISATION

Each of us has his or her own personality. But how did we come to be the kind of people we are? In studying how children become the kind of little people they are, we are studying their personality and social development; we are studying, in fact, their early socialisation.

Some people may wonder if it is possible to speak of personality and social development at the infancy stage. Has a little infant - the one year old - got a personality? To answer this question you have only to ask any mother who has had two or more children. She will soon tell you that children are different - even if they are brothers and sisters. A mother might say, for example, "This child is not like the last one. This one is so calm and quiet and rarely cries, whereas my firstborn never stopped crying and was always restless." In this example the mother is referring to differences in **personality** between her children. She is showing us that they are **different people**.

At the infancy stage, it is mainly people who influence a child's personality development, but to a lesser extent, events in the child's life also play a part.

It would not be hard to guess that the people who most influence a child are the mother (and other females in the family), the father and brothers and sisters. The mother can influence the child in many ways. Her attitude to the infant is perhaps the most important way in which she influences the child's personality development. Most mothers, we assume, love their children but this is not always so. For various reasons it is possible that a mother's attitude towards her child could be rather negative. Perhaps she longed for a boy and the baby was a girl. Perhaps she already had nine children and did not really

want a tenth! The way a mother **feeds** her child might also influence his personality. We have already mentioned the arguments concerning breast feeding and bottle feeding (Chapter 4). One thing we must remember about breast feeding is that the child not only receives milk, but also receives comfort and a feeling of security and love, and these things can influence his growth as a person.

FINDINGS OF THIS STUDY

Besides growing in body, which we noted in the previous chapter, our 400 one year olds were also growing in another way. They were growing **as people.** Already, if we looked very carefully, we could see that they were learning to live with others, to mix with others and, eventually, to communicate with others. By the end of their first year these infants were becoming **socialised** and had already learnt some of the necessary skills of living with others in society. This is the area of development which some child psychologists call "**Early Socialisation**".

In this chapter we shall follow the fascinating story of how, gradually our 400 infants learnt various "social skills", such as, moving around their society (walking), controlling urination (toilet training), etc.

There are several important aspects of early socialisation which we asked our sample mothers to comment upon. Let us look at some of the most interesting aspects.

WALKING

As you know, children in Lesotho and in other parts of Africa tend to walk **earlier** than their little counterparts in European countries. In fact, they seem to reach many other early "psycho-motor developmental milestones" before their European 'counterparts'.

Compare the ages given for the early motor stages leading to walking, given in the chart below, with what you know of your own Basotho infants.

Early Motor Development

It would be useful if you could observe a one year old in Lesotho and note down the ages (in months, of course) at which he or she attains the "milestones" shown in the chart above.

In **our** sample of 400 one year olds, the figures for "walking" turned out to be like this (remember that the figures refer to children aged 11, 12 or 13 **months**)

Not walking yet	57 (14.3%)
Standing only	78 (19.6%)
Holds furniture	43 (10.7%)
A few steps only	51 (12.7%)
Yes, infant is walking	171 (42.7%)
TOTAL	400 (100%)

As you can see, more than half the sample (55%) were already walking, either just a few steps (12.7%) or walking well (42.7%) by the end of their first year of life.

Regional figures for walking - either a few steps or walking well, were as follows:

	% already walking
Mountains	45%
Lowland-Foothills	55%
Urban (Maseru)	67%

How can we account for the regional variations? The figures go up in steps of 10% - 12%, don't they; that is to say, the mountain sample has the least number of "walkers", lowlands-foothills has 10% more and Maseru has 12% more than lowlands-foothills and 22% more than the mountain infants. Why are Maseru infants the champion walkers? Could it be because most Maseru mothers are working, hence their infants do not get as much 'carrying' as in the other two geographic areas? These infants (in Maseru) may be put in contact with the floor earlier? This requires further study (would **you** like to do some research on this for a project?). Some research, in other parts of the world, has linked walking and infant carrying practices (Dennis, W. & Dennis M.G., 1940). We have already discussed carrying practices with our sample (see Chapter 3). What do you think? Do carrying practices amongst the Basotho help or hinder walking?

One point of great importance in the mental or intellectual development of the infant is that walking enables a child to **explore** his environment. When the baby is born he is almost helpess. It is

many months before he can do anything for himself. He must have others to feed him, wash him, keep him warm and dry. Gradually however, we see a change coming. Slowly, slowly the infant begins to get control of his reflexive movements. He begins to move his arms and legs in a controlled way. This control helps the infant to learn to do things for himself. At first he does very simple, small movements such as lifting his head and reaching out his arms. Later he learns to turn himself over on his side, then on to his stomach. Soon, as all parents know, the child is able to move himself along the ground. Gradually, gradually, this ability to move is perfected, first by pulling himself along on hands and knees, later by pulling himself upright on furniture (or people!) until the wonderful day comes when the child takes his first **unaided step**.

Just think, for a moment, about the great importance of this first step - and of the other steps which follow the first. Now the child is not so dependent on others. **She can move herself**. Within the limits of her newly found skill she can move around her little world. If she likes the look of something in the corner of the house (that is, if it arouses her curiosity), she can go and look at it herself. She no longer has to wait for someone to carry her there. She can continue the "search to find out about the world" which was started when she began to reach out with her tiny hands to objects very close by, only now the range of objects she can find out about has increased dramatically because she can now walk round her little world.

As in the case of "carrying practices" already mentioned in Chapter 3, so here, in the case of 'early walking', we may be coming close to finding the cause of the "infant precocity" noted by earlier researchers in Africa. (For a good summary of the early infant precocity in Africa research, please read Mallory Wober's account in "Psychology in Africa").

If an infant is on his two feet walking around, exploring his environment at the age of one year, he has an advantage over other infants who walk much later (in England, for example, the average age for walking is between 13 and 15 months).

If we add the advantages of carrying practices (mentioned in Chapter 3) to the advantages of early walking and early exploration of the environment, we have at least two good reasons for "precocity".

Here, once again, is an important (and fairly easy) topic which cries out for **further research**.

PLAY

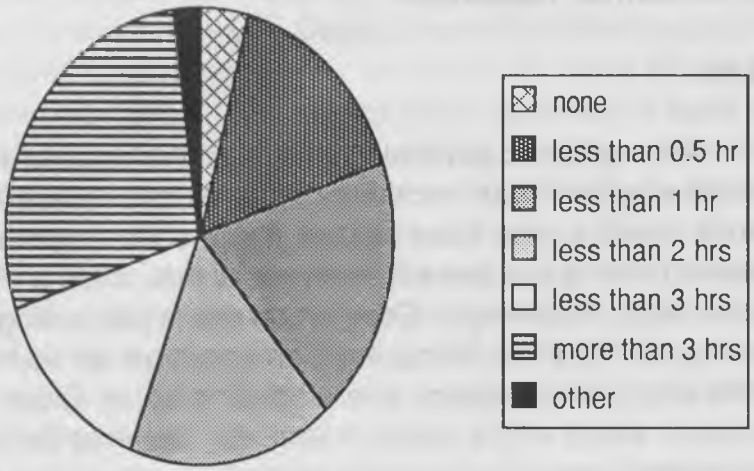
Although child psychologists accept the value of **infant play** as almost a 'gospel truth', mothers do not always realise its importance. Those readers who have studied some child psychology in their teacher training courses will surely recall that, when a child is **playing** she is also '**learning**'. Even when she is just putting objects to her mouth, feeling them, lifting and carrying them or walking over to an interesting, shiny object, she is beginning to 'learn' many simple concepts which will be useful in later life. She may be 'learning' about weight and texture; about shape and colour; about time and distance.

If you are looking at an infant who is playing with a coca-cola can, putting it to her mouth, rolling it, banging it on the ground, then you ask the mother ":what is your child doing?", she will probably reply, "Oh, nothing. She is not doing anything really, just playing." But a teacher or child pyschologist seeing the same child doing the same thing would say, "That child is **finding out** about the coca-cola can, she is finding that it is hard, not soft, (even before she knows the words 'hard' and 'soft'), that it rolls, that she cannot eat it." In other words, the teacher sees that the infant is **learning**.

In view of what has just been said about the importance of play, our interviewers wanted to ask about this crucial area of development. One question we asked was about the place where the baby played. As expected, we were told by almost all the mothers (93%) that baby played on the floor. The small minority (7%) whose infants did not play on the floor, said they played on a bed.

Then we asked the mother how much time she herself spent playing with her infant. The results were as follows:

Pie chart 3: Time per day Mother Plays with Child



The answers were fairly evenly spread between those who said they played for half an hour per day (16%), 1 hour (19%), 2 hours (17%), 3 hours (14%), with the greatest number claiming they played with the baby "more than 3 hours per day" (28%). These rather surprising results may have several different interpretations. One is simply that, as infants in Lesotho are nearly always close to their mothers, in a sense the mother is playing with (or at least is with the child) for many hours of the day. It may also be that, what mothers thought of as "playing with the child" was not exactly what a teacher or psychologist would call playing. It depends on how 'play' is defined. In our survey, what we meant by play was, how long did the mother spend actually sitting on the floor with the child, indulging in some interactive behaviour.

It may seem unlikely that many mothers would have a whole 3 hours of time to spend doing this, but that is what 28% of them told us. Of course, they would include the long evening hours even if during the daytime the mother was too busy to play with the child. Also, we know that the mother is not the only person who would play with the infant. Older siblings, as well as grandmothers would also help.

All in all, it would seem that Basotho infants get plenty of attention which, at this level, is nearly always in the form of some kind of 'play'.

As 'play' is so important in intellectual development, have we another reason to add to carrying and early walking, for thinking that Basotho infants get "off to a good start"? (Now you know why we chose this title!)

How many toys did the infants have? A "toy" in our survey is defined as a **bought** plaything. The child could, of course, play with many other objects such as sticks, stones etc. which are not bought playthings, but we were interested in finding out if toys, so easily available in the shops these days, were being used. Here is what we found:

Number of toys	% of sample
No toys	22%
1	17%
2	16%
3	19%
4	12%
5	8%
6	2%
7	2%
More than 7	2%

Regional variations were as follows:

NO. OF TOYS	No. of Mountain Infants	No. of Lowland-Foothills Infants	No. of Urban Infants
No toys	15	51	23
1	9	39	21
2	12	31	20
3	37	10	28
4	28	3	17
5	21	1	9
6	8	1	1
7	4	1	1
More than 7	1	0	8

The mountain children seem to be the best off for toys, with 86 of them having between 3 and 5 toys each. In the urban sample, 54 have 3 -5 toys and in the lowlands-foothills group, only 14 infants have

between 3 and 5 toys. Why these contrasting totals? (This is another area that demands research).

HAPPY AND SAD INFANTS

Mothers of infants - even very young infants - will tell you that it is possible to observe "moods" or "emotions" in their babies. Sometimes the babies are happy, sometimes sad, sometimes they are excited, but later are frightened or worried. All these moods or emotions loving mothers can observe by looking at the baby's face, listening to his cries and watching the movements of his arms and legs. This is a very interesting area of development, for it can help us to note the growth of the infant as a **person**. Emotions are very **personal** feelings; no one else can feel exactly what you feel (although they may feel something very similar). When a baby shows her emotions by facial expression or voice, she is really telling us something very deep and personal about herself. As these emotions increase in range and intensity we can see that the baby is developing as a person and beginning to show "moods", "feelings" and "emotions", as other human beings do.

To investigate this wonderful and complex aspect of our one year olds' growth, we persuaded mothers to comment on their child's sadness or happiness and this led to other questions concerning discipline methods and attitudes towards crying.

First of all, how did mothers characterise their children as far as their "moods" or "emotions" were concerned? Almost all of the 400 mothers (95%) characterised their children as "happy". We then asked if their babies were usually "calm and quiet" or "easily upset". Again, most (80%) commented that their babies were calm and quiet, not easily upset. So, the initial impression given by the mothers was of a lot of calm, happy infants, blissfully enjoying their little selves all day long. But we all know this is not really true to life. No child can be blissfully happy **all** the time - even if he is **usually** so - and the child who has **never** cried has not yet been born! Indeed, only 23% of the mothers said that their baby was seldom or never miserable, leaving 77% who sometimes were! That is why we went a little further in our questioning and asked, "What, sometimes, makes him/her miserable?" Here the main and, in some cases, the only cause was illness; "he is miserable only when he is ill", most mothers told us. A

few mentioned that he is miserable "when he wants attention". In these two reasons for being sad don't we hear an echo of our own selves!

What about that most frequent source of pain and sadness in childhood - being punished by parents? (This aspect of child-parent relationship will obviously be more important when the child is older and will be dealt with in Phases 2 and 3 of our longitudinal study, but even young children can suffer parental wrath). What about one year olds? Did the mothers in the survey **smack** such little babies? Well, 83 of them (21%) actually admitted it! Most others (70%) said they used words only to punish the infant, or words plus a little tap. Some mothers quite sensibly said that they did not usually punish the baby but would do so if the child was behaving dangerously, e.g. continuously moving towards the fire or annoying an angry dog. When we asked mothers about their **general feeling** about punishing infants, more than half (53%) said they agreed with smacking, although 6% of this 53% said that, although they agreed with smacking, they themselves did not use that method of punishment. (We must remember, all the time, that mothers are talking about the one year olds in our survey, **not** about older children.)

As smacking - or other punishment - leads inevitably to **crying**, we asked mothers whether they thought it did a child any harm to be left to cry. (We asked this question when talking about children waking up at night but, as most mothers clearly answered it in a general manner, to include **all** crying, it can be commented on here). What did mothers say? Well, fortunately for the infants, most of our survey mothers seem to be warm hearted, for 60% of them answered emphatically that it **did** do a child harm to be left alone to cry. But 30% gave it as their opinion that it did **not** do the child harm to be left to cry. What do you think?

TOILET TRAINING

The way a child is toilet trained might affect his personality. Toilet training in all its many forms (which depend on the toilet facilities available to the family) is the first little item of **"social learning"** that the child has to master. In all cultures, although methods of toilet training differ, it seems that all babies everywhere have to learn that

defaecation has to be controlled. Now the way the mother (or other females in the family) train the child in this control can help to form his attitude towards other social controls and so, in this way, may have an influence on the child's growing personality. In some cultures a child is toilet trained very early, within six months, and very strictly, accompanied perhaps by punishment. In other cultures the process is spread over several years and is done in a very casual and gentle manner. As this is the child's first introduction to "social learning", his attitude towards this training may carry over into later items of social learning.

What did our survey reveal concerning this little piece of social learning? 64% of mothers said their infants did **not** use a potty for wetting but the strange thing is, of the 90 mothers who said they **did** train their babies to use a potty, two thirds (60 mothers) came from the lowlands-foothills area. Why are mothers in the Mohales Hoek district different, in this respect, from their sisters in Maseru or Qacha's Nek? No one knows. Is it a quirk in our statistics, or simply that some enterprising businessman was more active in selling potties in that area?!

65% of all the 400 mothers said they had already started toilet training (i.e. within the first year), with 22% starting within 6 months of the child's birth. Taking the sample altogether, the number of families who possessed a latrine was fairly even (214 had one; 186 did not), but in the lowlands-foothills region, 70% did not have a latrine and in the mountain region 66% did not have one, whereas in Maseru, only one family did **not** have a latrine. The Maseru sample, therefore, accounts for most of the 214 latrines mentioned above. Almost 70% of mothers gave it as their opinion that a child ought to be "dry" in the daytime before eighteen months old.

Finally, we asked how **concerned** the mothers were about this business of toilet training. 40% professed themselves **un**concerned and the same number (40%) reported that they were **very** concerned. The remaining 20% stated that they were only mildly concerned.

OTHER SIGNS OF "EARLY SOCIALISATION"

To make the story of "early socialisation" complete, we must now mention several signs of development which were **not** covered in our

study. (No study, of course, can cover every aspect of a topic and for lack of time, we were forced to omit certain areas of personality development from this present research).

One way in which we see signs of an emerging personality is in the **smiling** of the infant. This little bit of behaviour in fact, is considered so revealing of an infant's personality that it has been closely studied by some child psychologists. They have noticed that the child's smiling behaviour seems to pass through three little stages. First of all, in the early weeks after birth, a child does what is called **reflexive smiling**. This is probably not true smiling as we would understand it at all, but merely caused by muscular movements of the child's mouth, or even by wind in the stomach. Then, from about the age of two months to six months, the child does **unselective** smiling, that is, she smiles at everyone, or even at round objects which resemble people. She will smile at strangers as much as at her own mother or grandmother. Finally, after the sixth month, we see the unselective smiling being replaced by **selective** smiling, in which the child gradually becomes more choosy about who she smiles at.

This change from unselective to selective smiling can sometimes come as a surprise to visitors to the family. They may have the nice experience of receiving a beautiful smile from the child when they first visit the two month old, but when they pay their next visit and the child is perhaps seven months old, they no longer receive the same beautiful smile. What has happened? It may be that by now the child has done some **social learning** and has learnt to distinguish between members of her own family and others. This leads us on, in fact, to another very interesting sign that a child's personality is developing.

Another way in which a child shows that he is growing as a person is by exhibiting what is called **stranger anxiety.** Somewhere between the fifth and eighth month, we notice that the child begins to show a certain fear of strangers. This is part of the same development we noted above connected with selective smiling. It would seem that by now the child has some idea of the difference between his familiar "care givers" (mother, grandmother and other members of the family) and those who are not part of this familiar circle of "friends". The child, in other words, recognises that strangers are different people and sometimes show this recognition in 'fear' behaviour. She may crawl

towards the mother at the approach of strangers or may cry if a stranger tries to pick her up. Although this kind of behaviour may upset the stranger, it is in fact a good sign of social development.

A third way in which we can see that a child is growing as a person, is when we notice the child exhibiting **separation anxiety.** This is when the child shows distress on being separated from mother, grandmother or other familiar female. When, for example, the mother has to leave the family for a day or more, the child might be observed to cry more than usual; sometimes he may not eat properly and if the mother stays away for a long time, the child might even lose weight. It is often the case, however, despite these little problems, that when the mother returns, she is told, "Everything was all right, the baby was fine while you were away."

We should note that stranger anxiety does not occur so much in countries like Lesotho, where the **extended family** system is in operation. In an extended family there are many mother substitutes, unless of course all these mother substitutes have to go away, as when all adults in the family have to attend a funeral, for example. Separation anxiety is more often noticed in the nuclear family, where, when the mother has to leave and the father is at work, the child may be left for a short while with someone else. We would expect this to happen more in Maseru than in the rural areas of Lesotho.

These three signs that the child is growing as a person (which were not included in the present study), would reward further research. It is to be hoped that in the near future, someone might undertake this very interesting and important work.

6 FATHERS

One of the most noticeable features of family life in Lesotho is the absence of fathers. As readers know, about 100,000 men from Lesotho, mostly between the ages of 20 and 35, work in the Republic of South Africa. These young men fall exactly into the age group of most of the fathers in our survey. That is why the most outstanding single fact about many of the fathers in our 400 sample families is that **they were not there!** They simply did not live, most of the time, with their families. It is felt to be important in giving a full picture of the life of the one year old infants in the sample, that this fact of "**father absence**" be faced and the issues raised discussed. We shall therefore give a brief account of the background to this problem, all the time keeping in mind that we are interested **mainly** in the effects of father absence on the infants. After the brief background remarks we shall then look at the findings of this study concerning this problem.

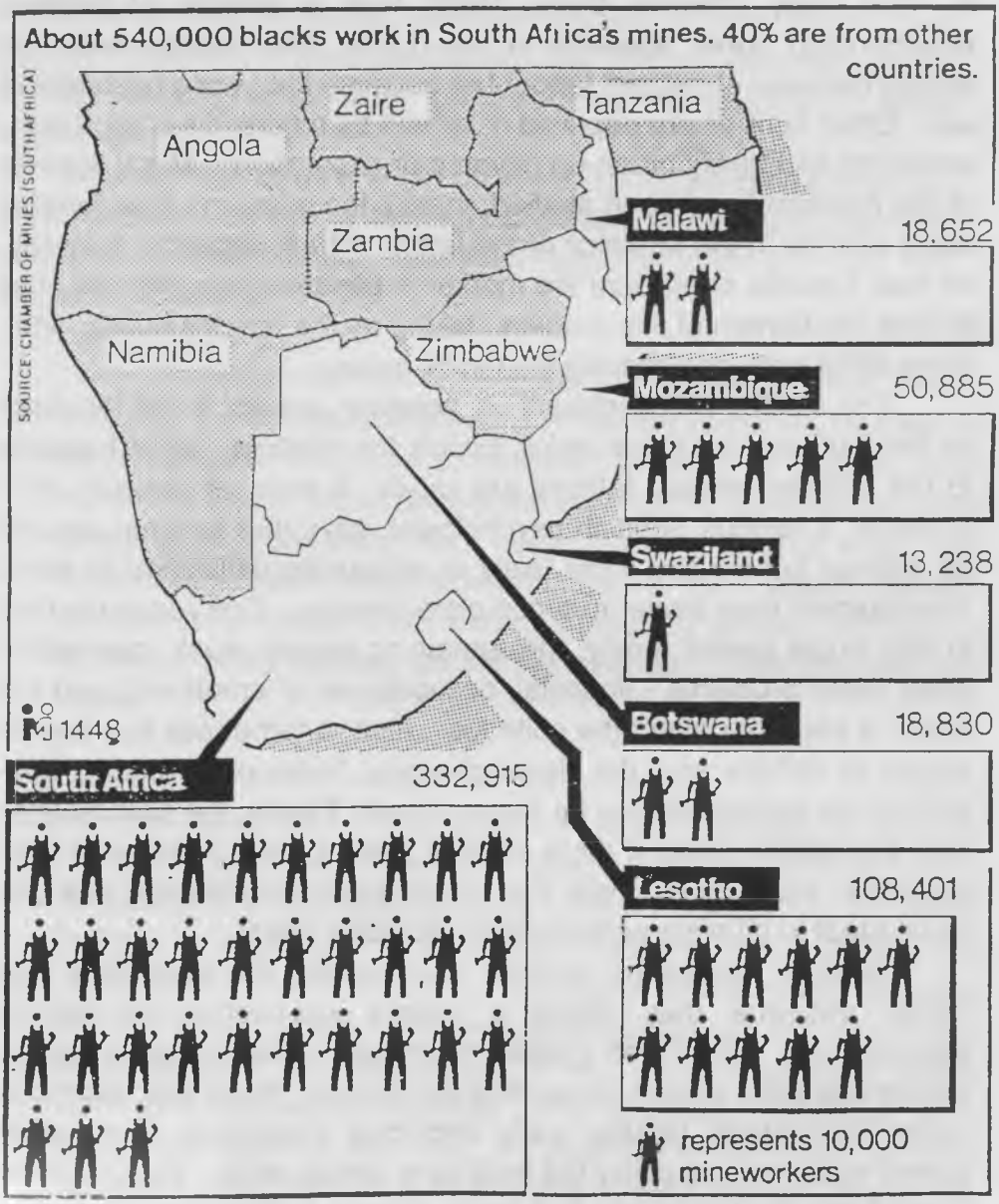
BACKGROUND TO THE PROBLEM

For many years Basotho men have sought employment in the Republic of South Africa. As far back as the 1850's and 60's it is known that workers left Lesotho to find jobs in Natal and Cape Colony, (Ashton, 1952). The fact of "migrant labour" has therefore been accepted for more than 100 years and continues, of course, today. The 1978 Labour force and Migration Survey states that Lesotho's

pattern of labour, "is characterised by a heavy outflow of male migrant workers mainly to the South African diamond, gold and coal mines".

The problem is not by any means confined to Lesotho, as the chart below clearly shows, but Lesotho has a greater percentage of migrant labourers than her neighbours in Southern Africa.

Migrant Labour in Southern Africa



RESEARCH ON FATHER ABSENCE

The phenomenon of absent fathers is not, therefore, unique to Lesotho. Other countries in Africa and, indeed, in the rest of the world face this problem and a fair number of research projects (but still small compared to other topics in Psychology) have been devoted to it. One study (Pauline Boss, 1980) took a sample of families experiencing father absence in the U.S.A. The fathers were not absent because of migrant labour but because they were prisoners of war. Other families are deprived of fathers by natural disaster, illness, accidents and family break-up (divorce or separation). Many aspects of the problem have been studied, mainly focussing on how families **cope** with life in the absence of the father. Much depends, they say, on how capable or efficient the mother is because she, after all, has to bear the burden of this problem, taking on the father's duties, often doing extra work and earning the family money.

The studies which interest us, however, are not those focussed on the mothers, but those which involve the children. What happens to the children whose fathers are rarely, if ever, at home? H.R. Schaffer, a famous Scottish psychologist, says that children brought up without fathers are more likely to encounter difficulties in social development than those from complete families. One reason is that, in any single parent family, the remaining parent must cope with a great many problems - financial, occupational or emotional, and this strain is bound to affect the child too. Also, a fatherless boy has no model to imitate and the developmental tasks of acquiring sex-appropriate behaviour may be more difficult. Finally, the child isolated with his mother finds it more difficult than a child living with both parents to learn, for example, that not all adults are alike and that one must adapt to differing personalities, (Schaffer 1981).

Several interesting studies investigated the possibility that father absence may affect a child's intellectual or mental development. Carlsmith (1964) examined 1,460 children whose fathers had been absent because of the Second World War. He found rather interesting results: early and long separation from father lowers mathematical ability but heightens verbal ability. But Carlsmith himself was the first to say that these strange findings require further

study. This was eventually done (Svanum et al, 1981), and it was found that there were no significant differences on scores on intelligence tests between 616 father-absent children and 5,493 father-present children, once socio-economic status was statistically controlled for. So, we are not sure if father absence can affect intellecutal development.

The trouble is that father absence leads to so many other problems like lack of money, overwork of mother, even illness, poor food etc., that it is impossible to pick out "father absence" as the precise variable which may be hindering intellectual or social development.

How do families as a whole cope with father absence? Here is a revealing quotation from a Tanzanian student, of the Pare tribe, who speaks of problems many students in Lesotho know only too well. Here is what he says,

> "Probably the most profound of all changes in recent years is that of the widespread absence of fathers from their families for long periods. There is a constant exodus of people from mountain areas. Many fathers are engaged in various jobs in the towns or in areas away from home, and the general effect has been that an alarmingly small number of men remain behind. These areas appear now to be inhabited by women and young children. Many families are for the most part reared by mothers alone.
>
> The effects of this imbalance are profound. In the first place many of the duties of rearing children which can best be done by the father will either have to be done by the motheror neglected altogether. In the second place there is a tendency for many fathers to forget their families when they are away, so that not only will the mother have to undertake those responsibilities which would normally be shared by them, but also the family may begin to suffer from malnutrition or from lack of clothing or some other problem arising from the father' absence. Moreover, in a patrilineal tribe like the Pare, the absence of the father for long periods, sometimes for as much as two years or more, may in the

long run make those who are faced with the 'rarity' of their fathers unable to understand the meaning of this tradition.

In many cases where the father is absent for a long time, some mothers will assign many of the duties which would normally be done by the father to the boys of the family. Such tasks are often too strenuous for the boys to manage, especially if the task is heavier than they should attempt at their age. They will not only be a heavy burden to a young boy, reducing his opportunities for play, but they may also absorb so much of his energy that the standard of his work at school may suffer drastically. This is probably the worst effect of the partial emigration of many of the fathers. It is still too early accurately to assess the psychological effects which the situation may have on the development of the younger generation."

(E.B. Castle, "Growing Up in East Africa")

I am sure many young people in Lesotho could agree with almost every word said above!

The effects of migrant labour in Lesotho, which leads to father absence, have been well studied (Van der Wiel, 1977; Murray, 1981). Usually the **economic** effects receive much attention and, it must be admitted, as far as national and family economics are concerned, migrant labour is absolutely necessary. It may be an evil, but it is probably a necessary evil.

In our study, we were particularly interested in the effects of migrant labour and father absence on **families** and especially on the one year olds in our sample. Luckily, this aspect of the problem has received attention from our own Demographic Unit at the University. Dr. Israel Sembajwe has neatly summarised the family problems which **may** result from migrant labour and the consequent father absence in Lesotho:

(1) Separation of husband and wife for periods of up to one year and sometimes up to three years, which may primarily result in marital disruption.

(2) Children have no model of home life nor of the roles of husband and wife and how they ought to treat one another and what parents should do.

(3) Deprivation of normal human relationships leads to prostitution and juvenile delinquency, amongst other things.

(Sembajwe, 1984)

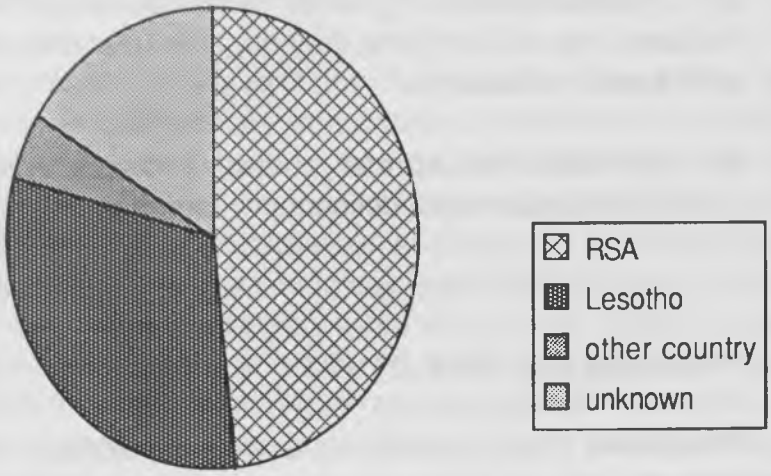
THE FINDINGS OF THIS STUDY

The above three problems are weighty matters indeed but, fortunately, they do not all have a **direct** bearing on the little babies in our survey. Traditionally fathers do not play much of a part in the lives of infants; in fact the old tradition banned them from any contact at all for three whole months. But these problems could have an **indirect** effect on the infants because they affect the mothers and what affects a mother can affect the child. If father absence makes the mother depressed and overworked or leaves her short of money, all the children in the family, including, in some cases, the infant, may suffer.

For these reasons, although we did not interview the fathers of our sample families, we did ask the mother for some facts and figures about "father's place" in the life of the infant.

Look, first of all, at some of the basic facts concerning the fathers in our sample. (Some information, such as age and education of fathers, you may recall, has already been discussed in Chapter 2). The following chart shows the countries in which husbands work.

Pie chart 4: Country in which Husband Works



More than half of the fathers, we were told, stay at the place of work including about 30 who were **not** miners working in the Republic of South Africa. Tracing the implications for family life of this absence, however, is complicated by the fact that they all come home for different lengths of time and at different intervals. The only large group which emerged from asking the question, "After how long does your husband come home?", were 20% who said "monthly" and 11% who said "yearly", the rest were pretty evenly spread in between. Added to this, of course, is the well known fact that, even when father is absent, he may be "psychologically" present because the mother threatens the older children with the dire punishments father will mete out "when he comes home."

An odd, interesting fact is that only 20% of mothers had visited their husbands at their place of work.

After getting an overview of the situation from the above information, interviewers then began asking questions more related to the aims of this study, i.e. more related to the life of the 400 one year olds.

The very abrupt question was asked:

"Does the child recognise his father when he comes home?" 50% had no hesitation in answering, "definitely yes" ; 20%

gave a definite **no** and some understandably said it was difficult to tell. 60% declared that there was a good infant-father relationship.

Finally, a very interesting question was asked about the mother's **personal views** of Father Absence:

"How do you feel, 'me, about your husband being away?"

Here are some of their answers:

> "I have actually learnt to live without him. He left Qacha's Nek in October, 1984 but the separation no longer bothers me. "

And a contrasting view:

> "When my husband is at work in the mines of the Republic of South Africa, I feel very lonely. I always wish he was present, especially when the baby is ill. It is not nice to be separated from a husband for two full years. I think it is not the way that a marriage should follow."

And a third view, which takes a middle way:

> "It is lonely without my husband, but sometimes it helps since it cuts down on the expenses. We can live cheaply since we don't have to prepare expensive food like meat. I also feel that his being away helps, because it is another form of birth control."

So, half of our 400 infants actually grow up without seeing much of their fathers. Will this have any permanent effect on their development? It is impossible to tell, at the one year old stage, but should become easier to monitor as the child gets older. Once again, we see the importance of the longitudinal design of this study, and how vital it is that phases 2, 3 and 4 should eventually be completed.

7 TRADITION AND CHANGE

(Metsi a macha a ntsa a khale)

Driving north one day towards Pitseng, I stopped at a remote village and asked if I could photograph a real old traditional house with its extended porch and 'litema'. Just as I was about to take the photograph, my companion nudged me; "Look", he whispered, "there, up on the thatched roof." I looked and saw, sprawling out of the traditional roof, a **television aerial**!! Truly, I thought, things are changing in Lesotho.

This question of **change** is important for the nation, the village and every family in Lesotho, but in the present study we were only concerned with change as it affects the one year old child. However, it is obvious that we cannot look at change in child rearing practices in isolation. Whatever changes we would note would probably be a reflection of change at a higher level, in the family and in society as a whole.

It may be useful, therefore, at the beginning of this chapter, to look briefly at some aspects of change in general, in Lesotho so that readers can judge if the changes in child rearing reflect a national pattern. We shall then go on to look at specific changes in the traditional child rearing practices of Lesotho.

SIGNS OF SOCIAL CHANGE

All cultures have been, are, and will continue to be, in a process of development and change along myriad dimensions (Herskovits, 1952) and Basotho culture is no exception. Even a casual observer of life in Lesotho could not fail to notice the **signs of social change** taking place all around.

We could get an impression of change by travelling, for example, from Mantsonyane, down the mountain road towards Maseru. At first we are on a bumpy, dirt road, passing traditional villages clinging to the steep hillshides, but fairly soon we come across a small hotel at Molimo Nthuse and later the road becomes tarred and the houses either side are likely to be square rather than circular in shape, and to be roofed with corrugated iron rather than traditional reeds and grass. Most of the people you will pass along the way, except for the very old, will be dressed in European clothes, although in winter the traditional colourful blanket may still be thrown over the top.

As one moves further down and on to the Roma road, the road now has white lines down the centre. Traffic rushes passed at an alarming speed. Soon one notices a few houses that have electric lights outside, then one is in the sprawling suburbs of Maseru, going down Kingsway, a broad highway with shops and offices on either side. Fifteen years ago villagers would ride their horses into Maseru. Now the hitching posts against which they tied their animals are well hidden behind yellow lines and parking places. Traffic lights have appeared in the streets and traffic jams occur every morning and evening. The town boasts a high rise office block, a number of supermarkets and a cinema.

These surface glimpses of "modernisation" no doubt hint at deeper and more important **social change**. The traditional "extended" family way of life is not operable in the town. In villages where many young men are wage earning miners, the "seat of judgement" is not the council of elders but the trade union; their ultimate recourse is not the principal chief, but the managing director. New pressures intrude into the lives of simple farmers, forcing them to take sides in matters which never troubled their fathers. Ancient folklore and superstitions are questioned in the wake of many years of

education. The traditional hoe has been replaced by the plough and the sturdy Basotho pony by the bus or car. Everywhere the old order is giving way to the new. Truly we can say, "Metsi a macha a ntsa a khale".

CHANGE IN VILLAGE LIFE

In most villages signs of change are not hard to see. Changes in housing styles are easy to notice. Changes in clothing are very striking.

With the increase of communication systems by road, telephone and radio, between Maseru and even outlying villages, more important changes are taking place. The very fabric of village life, in one sense, is being eroded, for villages are becoming less and less little isolated entities with a life of their own, and more like splinter groups of bigger groups from which they may be separated geographically but to whom they are now being linked by an ever increasing web of communication.

Not all change is progress, of course, but neither is all change detrimental to village life. The provision of bore holes and wells must certainly be welcomed by those who had to walk several miles for water. On the other hand, the growth of little shops selling beer may not be welcomed by everyone. It may be that the calm, outwardly serene, atmosphere of a village which one senses looking down at the tops of houses from high up on a hillside, was not an accurate view of village life at all. But there is no doubt that the **pace of life** and the number of influences bearing down on villages in Lesotho have increased enormously in the past ten years and have had a corresponding influence on the lives of families and children.

IMPACT OF CHANGE ON FAMILY LIFE

Changes at national and village level are important but it is perhaps at the level of the **individual family** that the true impact of change is most keenly felt, and this applies to families in both town and village.

One of the most evident causes of change at the family level is **education.** Mothers complain that the children are learning new

ways and new knowledge, and that both of these are taking the children away from them. It is said that the well educated young men or women know little of the traditions of their ancestors, do not obey parents as in the 'good old days' and often cause anxiety; complaints surely echoed by mothers all over the world.

Perhaps not quite so evident, but even more insidious, is the effects of migrant labour on the whole fabric of family life in Lesotho (as noted in the previous chapter). This aspect of change does not suffer the same amount of loud complaint as education because, as we have seen, it is the main source of income for many families; it is, as it were, a cruel necessity so is not blamed too overtly, but there is no doubt that husband and wife and child-father relationships suffer greatly in this situation. The economic advantages of migrant labour to some extent cloak the social ills that the system brings. Illegitimacy is said to have increased, although official statistics are not available. This would not be surprising in cases where the father returns infrequently, or where it is doubtful whether he will return at all. Older sons have learned to take on the roles of head of the house where the father is almost continuously absent, although in this, as has already been said, they will be supported by grandfathers and uncles. Young children go for long periods without seeing their fathers and some mothers will admit that, when the father comes home, the child doesn't even recognise him!

Another important change has been brought about by new methods of agriculture. Where formerly the family would dig its own field, then plant and harvest its own crop, there are now large shcemes embracing many of the villages in the lowlands which organise what is called 'share cropping'. At the beginning of the ploughing season brightly painted tractors trundle in from South Africa and are distributed over the length and breadth of the Lesotho lowlands to be hired by local groups under the control of a development agency or a local cooperative and the fields are ploughed very quickly. At the end of the season, it is not uncommon for the crops to be harvested again in a cooperative manner, sometimes even using combine harvesters. Families might still have had to do their own weeding of their plots, but for the most part, the traditional work of the family has been taken over by these outside agencies. At the end of the agricultural year the family simply has

delivered to it the number of bags of maize or wheat proportional to the size of the field they put into the joint venture.

Are modern influences such as education, migrant labour and change in agricultural methods really having an effect on families? There seems little doubt that the average family today is very different from that of 20 or even 10 years ago. Indeed, a new kind of family may be evolving in Lesotho. In the past, the essence of family life was self sufficiency. A man built his own house with materials he cut and gathered himself. He then cleared his land, planted and harvested, and fed his wife, children and cattle. Now the general trend is towards greater dependence; dependence on wage earning in South Africa, in other words, on the cash economy and on the labour market of a foreign country.

Such problems are not, of course, unique to Lesotho; they are common to many developing countries, (Ward, 1979); but this change in family life must certainly affect the children and this is where it becomes relevant to the present study. What is happening to the children of Lesotho today?

TRADITIONAL CHILD REARING PRACTICES

One way of measuring the amount of **change** taking place in the lives of one year old infants in Lesotho was to ask mothers how well they had observed the old Basotho traditions concerning the first year of life. (There are other customs, of course, which refer to **older children**, but this study is concerned only with **infants**). These questions seemed to interest the mothers. Indeed, many friends and colleagues, hearing about our study, seemed to be mainly interested in this aspect - how are the old traditions being kept? Some friends even thought the whole study was about this topic and may have wondered, in reading this book, why it has been left almost to the end. The reason is that, having read the preceding chapters, we are now in a position to **measure** how far child rearing has moved since the old days.

Now, let us consider some typical Basotho traditional practices concerned with early infancy. We will not insult our readers by explaining in detail what each practice entails and means, although we did meet, in our interviews, several mothers who had never heard

of some of the practices we asked about. If **you** don't know what they are, we suggest you ask your grandmother!

(1) **Holding infant to the Moon:** This is still a fairly popular custom practised by about half of our sample (48%). In Maseru many said they did **not** do it at all (68%), leaving only 32% who fulfilled this custom, while in the lowlands-foothills villages, exactly the opposite result was found, i.e. 68% **did** fulfill the custom and exactly 32% did not. In the mountain region, the totals were 43% yes; 57% no.

(2) **Putting child out in rain:** This is one of the most **popular** of all the customs and was still practised by 73% of the 400 mothers in the sample - i.e. 290 of the 400. Even our supposedly "modern" mothers in Maseru enjoyed this custom - 48% still practised it. In the mountains, almost all did it (84%) and in the lowlands-foothills, 85% carried out this practice. Why is it so popular? Perhaps it is just good fun, or perhaps there is a lingering feeling in the minds of even educated mothers that "it is better to do it than be sorry later". Perhaps it works. Do the shoplifters and thieves all come from families who did **not** fulfill this custom?! What a wonderful topic for research! The researcher would have to go to the prison, find the thieves, then trace their mothers and ask, "Did you put him out in the rain when he was a baby?" Thus we could find evidence for or against the truth of this custom.

(3) **The practice of "Koeetsa":** This is a very interesting custom. I am sure you remember that, in the old days, they used to hang a piece of the paw of a pole cat round the baby's neck. What happens today? Well, as there are no pole cats, other objects, as we know, have sometimes taken the place of the original ornament, such as blue and white beads attached to a cloth. So, taking this new kind of "Koeetsa", how many people still practise this custom? If our 400 mothers are anything like other mothers in Lesotho, we can say that this custom is in a fairly healthy state because 43% of these mothers still do it. Most of this 43%, however, came from the mountain or lowland-

foothills regions. In Maseru the custom has almost totally disappeared with only **20** mothers (5% of our sample) actually practising it.

In passing , we should note that this custom is a good example of "replacement". By this is meant that it is an example of how something "modern" (like beads) takes the place of the 'old' object (the claw of a pole cat). We see this "replacement" being practised in other customs (which we do not discuss here because they do not concern infants), such as in the notification of bereavement. In the old days, they used to send runners or messengers all over the country to inform relatives. Nowadays, all this can be done by Radio Lesotho!

(4) **Informing husband of the birth:** We asked the 400 mothers whether or not they had practised the time-honoured custom of informing the husband of the birth by beating him if the newly born was a son, or pouring water on him if he had acquired a daughter! Much to the disappointment of the present writer (whose own son was born during the course of this research), it would seem that this colourful custom is dying out. Only a woefully small number (23%) of our sample still practised it. Of course, many of the husbands are away from home these days, so it is not surprising that the custom is disappearing (one could hardly go to the mines in South Africa and start beating your husband because he had a son!) In Maseru, as expected, only 9 families (just 2% of the whole sample), still practised the custom, and even in the rural areas - often said to be the "bastions of tradition" - only 29% (mountains) and 26% (lowlands-foothills) informed the husband in the traditional manner.

(5) **Putting two reeds (or Thapo) in the roof:** On a more cheerful note, we can announce that this old custom still survives and is doing very well in rural areas. No less than 95% of the lowland-foothills sample told us that they practised it and 70% of the mountain mothers also do it. Maseru, as usual, lets us down; only 22 still do it (5.5% of the 400 sample). Overall,

that is taking the whole 400 together, 245 mothers fulfilled this custom (i.e. 61%).

I suppose we can forgive the Maseru families for neglecting this ancient practice, because it would look strange indeed, to see two reeds sticking out of the roof of a modern house (next to the T.V. aerial!!) and, if they tied Thapo, people would trip over it!

Incidently, the common use of "Thapo" for those who have a tin roof is another example of "replacement".

(6) **Naming the child:** Readers will recall the old custom of naming the child on the day the remains of the umbilical cord fell off and also giving the child his/her first haircut on that day. How are these two customs surviving?

According to our 400 informants, 55% still give the first haircut on that special day and 67% named the child on the day the remains of the umbilical cord fell off. As usual in these totals, most of those who kept the old custom were from the lowlands-foothills, next were the mountain folk and finally, just a few in Maseru.

Asked if their grandparents chose the name (as tradition demands), nearly all mothers (81%) said "yes". Grandparents still have this honour, therefore, even in Maseru ,where 80% of the 128 mothers told the interviewer that the grandparents named the baby.

This was the only traditional practice in which all three geographic areas had almost the same scores - all three gave around 80% answers **in favour** of grandparents choosing the infant's name. In view of this fact, we were interested in finding out if the traditional names were still being given. Here are some examples mothers told us:

"My baby was given a name by her grandmother. It was "Khothalang", meaning 'have courage'.

"My baby was named by the grandfather. The name is "Likeleli" meaning 'tears'. The family cried because a fatherless child had been born."

"The baby was named by the grandmother who chose the name "Limakatso", meaning 'miracle' because grandmother wanted a boy but it was a girl so the name implies God does things in a miraculous way."

(7) **Protecting child from witchcraft:** Even in this scientific age when, as we noted in Chapter 2, almost all the mothers in the sample had some education, protecting the child from witchcraft is still practised by more than half of the mothers (52%). In the Mohale's Hoek villages - the lowlands-foothills area - 69% took some precautions against witchcraft. In the Qacha's Nek mountain villages, it was 65% while in the urban area (Maseru) sample the number was a mere 21%.

What kind of protection was used? Perhaps the mother's own words can explain better than mine:

"I think it was before she was one month old when I went to the traditional doctor. I had the normal stomach which all mothers experience when the womb goes back to its normal position. **I drank traditional medicine** and gave some to my daughter." (i.e. the baby).

"I used herbs to protect him. Some were cooked and given to him to drink. Others

were prepared as ointment and the child used to be smeared when he had a bath."

"When I went on a journey, the first thing was to smear medicine on the baby's forehead to prevent the sinking of the fontanel."

. . . and so on - all well known procedures. So it looks as if this aspect of traditional child care is still doing quite well, mainly in the rural areas.

(8) **Paying 'Bohali':** Of course this custom is still in operation. Indeed, it seems to be much more than a traditional practice - it is a serious family business matter. This was practised by 82% of our overall sample of 400 with 89% of the lowlands-foothills sample using it, 83% of the mountain sample and - only slightly less - 77% of the Maseru sample.

Although this custom is practised by nearly everyone, as most readers will know, it has changed quite a lot since the old days. In yet another example of "replacement of customs", we often see **money** being paid instead of cows. Also we sometimes hear that not all bohali is paid **before** the marriage; it is often paid in installments. Nevertheless the great thing is, it is **still being paid**!!

This custom, common throughout Africa, has received much attention from social economists, who see it as a way of 'evening out' or redistributing the wealth between families. It is also said to lead to more stability in marriages since, if a husband and wife divorced or separated, one family would lose some wealth in cows or money. It is also an interesting example of how a marriage between two young people - the boy and the girl - is considered as a union not only of two people, but of two whole families. And this holds true even when today, in Lesotho, it is not always the parents who **"arrange"** the marriage. In fact,

of our 400 mothers, only 32 (8%) reported that their parents "arranged" the marriage.

Much of what has been said above, concerning the payment of 'bohali' in Africa is in stark contrast to what happens in Europe. The old tradition in England was for the **girl's** family to pay money to the man's family. It was called a "dowry". Nowadays, they do not pay anything to either family, but a remnant of the old dowry idea still remains in that it is the girl's father who must pay for the wedding celebration. The only financial committment of the bridegroom is to buy the ring!

CONCLUSION

To end this chapter on Tradition and Change, let us try to make a few generalisations. It is too large a question simply to ask, "Have child rearing practices (and other related practices) changed?" We need to look at the details of how the old customs are kept or forgotten and above all, at how the upbringing of infants has changed.

Most of the foregoing sections have contributed data towards answering the first problem - to what extent are traditional customs kept or neglected? To answer the second question - about changes in the upbringing of infants - we asked the mothers for their opinions. We asked, "Do you think, 'me, that you are bringing your baby up in the same way as **you** were brought up or in a different way?" Their answers were very interesting indeed. Here is a small selection of typical answers:

A mountain mother. . .

> "I am bringing my babies up (she had twins) more or less as I was brought up. For instance, I hadn't thought of giving the twins solids. My mother said that I should have started earlier. In fact, most of the things I do concerning up-bringing I have adapted from my mother. Clothes may be different because things change with time. I remember one time

when it rained for two weeks and the nappies couldn't dry. I went to buy new nappies but my mother said I was wasting money. In her day she said she used her apron or a towel."

Another mountain mother . . .

"I did not wear nappies when I was an infant, but my children do. When I was taken on a journey, I was wrapped in small blankets torn from adults' blankets, but now my children wear vests."

A Maseru mother . . .

"One difference is that I will not leave my child without adequate (adult) supervision, whereas I used to look after my brother for the whole day when I was only eleven years old."

Another Maseru mother . . .

"I am giving my child a variety of food which I think **my** mother did not do. I take my child to the doctor even when not sick, just for a check up. However, in things like smacking the baby, my mother tells me she used to do it to me."

Yet another Maseru respondent . . .

"The feeding methods are different and also the general care. Maybe I am more anxious to spend more time with my child, that is why I do not want anyone who I feel is unreliable to look after him."

And finally, as a kind of summary, a lowlands-foothills mother told us:

". . . although I cannot tell how I was raised at her (baby's) age, I believe the way is very much the same, for it is based on love. The only difference may be in food. Most baby foods were not available, let alone known, to my mother. Clinics did not exist during my own infancy. Finally, today there is a big change in life in general which may affect the way I raise Lerato."

Thus this final quotation brings us neatly back to what was said at the beginning of this chapter, that changes in child rearing reflect changes in Basotho society as a whole. The main changes noted by mothers - as we have just seen - refer to types of food and clothing; the availability of clinics and, most significantly perhaps, the desire of mothers to spend more time with their children, in other words, to take more **notice** of them. All these changes are reflected in recent developments in Basotho society, including increased health facilities, child care instruction and general education.

A general conclusion which we may be allowed to make, and which we think is justified by the data produced in the study, is that infants nowadays are likely to have a happier time, to be better fed and clothed and to have their health needs catered for. Of course there are exceptions, but if what we have said above is true, then the future looks bright for Makete (mentioned in the Preface) and the other 399 one year olds in our study. Indeed, as these infants are the future men and women who will inherit this land, we can say, perhaps, that the future looks bright, not only for them but also for our beloved Lesotho.

8 OFF TO A GOOD START

What can be concluded, from the foregoing chapters, about present day child rearing in Lesotho? What do all the facts and figures add up to? **What do they tell us, in summary, about infants in their first year of life?**

Sifting carefully through the evidence for general basic conclusions, and weighing up the findings of this and other studies, it is felt that **five** very fundamental conclusions can be drawn. But before we look at them, it may be useful (indeed essential for some readers) to bring together in a **summary or overview** what has been said so far.

AN OVERVIEW

One interesting way of providing an overview would be to present a "bird's eye view" of the kind of life an infant in his first year leads. To do this I have taken just one example from hundreds of observations made of an **entire day** in the lives of infants. This example will, I trust, provide a kind of summary of what has been said in the previous chapters which is necessary if we are to understand the conclusions and at the same time piece together the actual "stream of experience" of our one year olds into a coherent whole. In the other chapters of the book we have taken facets of the childrens' lives - their nutrition; early socialisation etc. and treated them **in isolation** as if they were distinct or discreet parts of infants' lives. This was necessary to ensure clarity of reporting but it did, unfortunately, produce a rather **fragmented** view of the babies' lives.

What we need now is an overview which will remind us how all these parts fit together; how they are all welded into the "daily round" of a typical infant.

So, before we start drawing general conclusions, let us look at one detailed observation of a day in the life of a Basotho infant. The example given below was compiled by a NUL undergraduate during the course of this research project. The student simply followed the infant around from the moment he woke up, to the moment he was put to bed, reporting in great detail what the child did or what was done **to** the child. (The name of the child is fictitious. He was five months old at the time of the observations).

A Day in the Life of Thabo

TIME	OBSERVATIONS
6.30 a.m.	He cries and wakes up. Mother changes soiled nappy. Breastfeeds the baby.
6.45 a.m.	Mother stops suckling him. Leaves him lying on his back in bed. He clasps his hands as though in supplication and kicks his legs in the air. Unclasps his hands and puts all fingers of the left hand in his mouth and sucks them. Keeps kicking his legs in the air. His sister (3 years and 9 months) gets into bed with him. Starts talking to him in baby talk. A huge grin appears on his face. He starts laughing and making babbling noises. He keeps on clasping and unclasping his hands, all the time kicking his legs in the air. He keeps on twiddling his fingers and making babbling noises. He puts the fingers of the right hand in his mouth and stares intently at a multi-coloured nappy bag hanging on the wall on his left.
7.00 a.m.	Keeps babbling and kicking his legs in the air. The sister stops paying attention to him, but still remains in bed with him. He pedals his legs in the air and keeps babbling. The sister takes hold of the right leg and keeps it on the bed. He cries and the sister lets go of his leg and he stops crying.

7.20 a.m.	His sister puts the index finger of her right hand into his right hand. He clasps it tightly and babbles louder and kicks his legs frantically in the air. The sister withdraws her finger and gets out of bed.
7.35 a.m	He starts crying.The mother is not in the room. I take him and he stops crying for a while, but starts again. I lie flat on my back and put him, in a sitting position, on my tummy. He stops crying for a while, making babbling noises. Starts crying again. The mother comes in. He stops crying and a smile appears on his face.
7.45 a.m.	Mother takes him into her arms. She sits on the bed, puts him into the crook of her left arm and feeds him baby cereal (a cupful) using a teaspoon. As he feeds he keeps kicking his legs in the air.
7.55 a.m.	He finishes the cup of cereal. Mother supplements it with a breastfeed. As he breastfeeds he makes grunting noises and keeps kicking his legs in the air.
8.00 a.m.	He stops suckling. He has soiled his nappy. Mother changes nappy and goes out, leaving him lying on his back. He starts crying. I take him and put him on my lap. He stops crying and stares at his sister playing on the floor. He cries again. I put my arms under his armpits and keep him in a standing position. He smiles broadly and laughs. I try to put him in a sitting position but he resists. I let him stand. I keep him in the standing position and he smiles. Saliva starts dribbling from his mouth. I wipe it off with the sleeve of his nightgown.
8.20 a.m.	The mother comes into the room. A huge toothless smile appears on his face. He makes as if to go towards the mother. I hand him over to the mother. She sits on the bed and puts him on her lap. He sits there contentedly, twiddling his fingers and lightly kicking his legs in the air. He is less active than earlier on. The mother puts him flat on his back.

8.30 a.m.	He starts crying. The mother suckles him. He kicks his legs in the air while sucking. He becomes less active and falls asleep. (Sleeps for three hours).
12.00 p.m.	He cries and wakes up. The grandmother changes his nappy and takes him in her arms. He puts his fingers into his mouth and sucks them. She prepares a milk formula which he sucks from a bottle. She supplements this with a soft boiled egg which he is fed with a teaspoon. He eats quietly and contentedly.
12.20 p.m.	She sits with the baby on her lap. The baby starts crying. She puts her hands under his armpits and makes him stand. He stops crying and a huge smile appears on his face and he starts laughing and waving his arms in the air. She tries to put him in a sitting position. He arches his back and resists being put down. He makes a small cry. She keeps him in a standing position and he starts laughing and waving his arms in the air. She tries to get him to lie down four times and he resists. Wants to be held in a standing position. Laughs delightedly when he is held in a standing position.
12.40 p.m.	The grandmother puts him on his back and he does not resist. She undresses him and leaves him lying on a blanket on the floor while she prepares his bath water. He plays by himself, pedalling his legs in the air and making babbling noises.
12.50 p.m.	She puts him in a tub full of warm water and washes him. He laughs and splashes about in the water. She takes him out of the water, dries him, applies baby lotion all over his body and dresses him. He alternately laughs and makes babbling noises all the time, pedalling his legs in the air. He puts all the fingers of his right hand into his mouth. He pushes them in too deep and chokes. He withdraws his fingers and coughs a lot. The grandmother gently pats him on the back and he stops coughing. He starts crying again.

1.00 p.m. The grandmother takes him in the crook of her left arm while preparing another bottle of milk formula. He finishes that also. She puts him on his back and leaves him lying there. He half turns on his left side and lies back again. He does this five times, then stops and cries. The grandmother takes him and holds him in a standing position. After a few minutes in the standing position he burps and laughs.

1.20 p.m. The grandmother leaves him lying on the blanket and gives him a rattle. He grabs it and tries to shake it. He can't shake it yet and just stares intently at it and laughs. The elder sister takes hold of his hand and makes him shake it. He laughs delightedly. This goes on for about three minutes. The sister lets go of his hand and goes outside. He remains on his back, rattle clasped in both hands and staring at it. He lets go of the rattle and it falls onto the floor. He turns his head in the direction in which it fell. He can't see it and stares at the ceiling, pedalling his legs in the air and waving his arms about.

1.35 p.m. The grandmother straps him on her back and does some washing. He laughs delightedly as he is being strapped onto her back. He does nothing much while on her back except to look alternately to the left and to the right. He grabs the collar of the nanny's blouse and tries to put it in his mouth. He does this five times and then stops. His eyelids begin to droop and his head falls forward. He raises it and opens his eyes. The eyelids droop and the head falls backwards. He raises his head again and opens his eyes. The eyes close again and this time he falls asleep.

1.55 p.m. The grandmother unstraps him and lies him down to sleep. (Sleeps for 55 minutes).

2.50 p.m. The baby cries and wakes up. The grandmother then changes his nappy. She prepares a soft boiled egg while carrying him in the crook of her left arm, and she mashes it and feeds him with a teaspoon.

He finishes the egg. She keeps the baby in a standing position on her lap and burps him. The baby laughs. After burping the baby she keeps him in a standing position. Supporting him with her arms under his armpits, she turns the baby this way and that, and alternately lifting him up into the air. Baby laughs delightedly all the time. She puts baby in sitting position on the chair, supporting him with a blanket in the small of his back. She puts a rattle in his hands. He takes it and puts it in his mouth. He withdraws the rattle and tries to shake it and it falls into the chair. He ignores it and takes the front of his shirt and stuffs it into his mouth. He sways a little and nearly loses his balance. He lets go of the shirt front and stares at me writing. He begins to cry. He wails loudly and the grandmother takes him in her arms and tries to rock him. The crying does not stop. She takes off his vest and shirt and leaves him with a nappy only. He stops crying and smiles.

3.15 p.m. The grandmother prepares another bottle of milk. He holds the bottle with his left hand while sucking. He sucks a few times then tilts his head backwards and with his left hand pushes away the bottle. The grandmother tries to push it into his mouth but he turns his head away and with his left hand pushes away the bottle. She tries again but he pushes the bottle away with his tongue. The grandmother stops trying to force him to take it. He has only taken about a quarter of the bottle. She makes him stand on her lap, her hands under his armpits and bounces him up and down, left to right in a little jig. The baby laughs as she does this. She stops it and puts him on her lap in a sitting position. For a while he just sits silently staring at me. He looks around and sees the bottle of milk next to him. He grabs it and lifts it to his mouth. The grandmother helps him and puts it to his mouth. He sucks for a few minutes holding the bottle with his left hand. He pushes

away the bottle and puts the first three fingers of his left hand into his mouth.

3.45 p.m. The grandmother stands the baby on her lap and burps him. She turns him round again in a little jig. The baby is smiling all the time. When she stops, the baby gives a little cry and she starts all over again. Every time she stops he cries. She puts him in a sitting position on her lap and he sees me. He watches me intently and seems fascinated by the smoke coming from my cigarette. Every time I blow smoke into the air he smiles and waves his hands about. I stub out the cigarette and he cries. I light another one and he stops crying. He seems fascinated by the match glowing in my hand. I move it this way and that and his eyes follow it. I put it out and he turns his attention to the smoke coming from my cigarette.

4.00 p.m. Nappy change time. While the grandmother is changing his nappy he turns his head in my direction and watches the cigarette smoke. The grandmother sits him on her lap and his attention is still on the cigarette smoke. The elder sister comes in and tries to play with him. He is not interested and concentrates on the cigarette. I put out the cigarette and he turns his attention to his sister. The grandmother lays him on his back on the chair and he plays with his sister. The sister talks to him in baby talk which is complete gibberish to me. The baby laughs. The sister now talks to him in language I can understand, but she talks the way a one year old would talk.

5.20 p.m. The grandmother gives him a bottle of sugared water. He finishes the water. The mother arrives. A huge smile appears on the baby's face and he stretches out his arms as if trying to reach for the mother. The grandmother hands him to the mother and the baby laughs. The mother takes him and breastfeeds him. He sucks lustily, grabbing the

breast with both hands. He alternately lifts his left and the right leg into the air as he feeds. He stops suckling and makes babbling noises. The mother takes him into the bedroom and lays him on his back on the bed. He lies staring at a multi-coloured nappy bag hanging on the wall, pedalling his legs in the air.

5.55 p.m. It is getting a little cool. The mother dresses the baby. She takes him in the crook of her left arm and sits him on her lap. He lies there quietly, clasping and unclasping his hands. He becomes a bit restless and starts wriggling. The mother puts him flat on his tummy on her lap. He smiles and laughs, kicking his legs. The mother places him on the bed on his back. He lies there babbling to himself, alternately clasping and unclasping his hands and putting them into his mouth. Nappy change time.

6.15 p.m. The mother changes him and applies baby lotion to his bottom. She again places him on his back on the bed. He waves his arms. She raises him into a sitting position and tries to make him sit unaided. He manages for a few seconds, then falls flat on his back. She raises him into a sitting position again and tries to make him sit unaided. Again he falls back onto the bed. She leaves him alone, kicking his legs in the air and waving his arms about. He starts to cry. The mother breastfeeds him. He suckles for a few minutes, then stops. The mother stands him on her lap and holds him against her breast and burps him.

6.30 p.m. The mother lays him on his back and he lies quietly, kicking his legs in the air and sucking his fingers. He stares fixedly at the nappy bag. The mother hands him to the grandmother while she prepares supper. The grandmother makes him stand on her lap. She turns the baby this way and that, bouncing him on her knee. The baby begins to cry. She gently rocks the baby, patting him on the back.

6.45 p.m. The sister comes in and starts to play with him. She tickles him on the tummy and he laughs. This goes on for a few minutes and the baby seems to be enjoying it. He grabs the sister's right hand and puts her fingers into his mouth. The sister pulls them away. She again tickles his tummy. He laughs for a while then starts to cry. The sister leaves him alone. He continues to cry. The mother decides he is sleepy. He keeps opening and closing his eyes, although they stay closed longer than they remain open.

7.05 p.m. The mother puts him inside the blankets. Once inside the blankets he becomes more active again. The sister kneels next to the bed and plays with him. This goes on for a few minutes then he starts crying. The sister starts stroking his hair and he stops crying. After a few moments he starts crying again.

7.25 p.m. The mother gets into bed with him and suckles him lying on her left side, her head propped up with her left hand. He suckles noisily for some time, then less and less actively, until he stops suckling completely and drifts off to sleep.

(Observations made by M. Khaketla)

These observations of a day in the life of a Basotho infant highlight different aspects of the lives of infants, which this book has tried to describe. Now let us draw some conclusions which we feel are justified by the findings of this research project.

CONCLUSION (1): Off to a Good Start

The most important general conclusion which can be drawn from this study, and which is so outstanding that it forms the title of this book, is that the one year olds in our study get "off to a good start". (And we all know that getting off to a good start in life is half way towards winning!)

Just recall, for a moment, what was said in the foregoing chapters and illustrated in a graphic manner by the "Day in the Life of Thabo". What we see is a group of 400 infants who, almost without exception, receive the kind of child care which will provide a solid foundation for later life.

For one thing, because of this good, competent child care, they have all **survived** the hazardous first year of life. Not all of their "companions in babyhood" managed to do this. Sadly, the Bureau of Statistics (Maseru) told us that 116 of every 1,000 live babies born do not survive the first year.

But for those who do survive, it seems to the writer of this report that the future looks bright - if the good work is kept up.

The above conclusion, as you will have noticed, is so general as to be almost meaningless, unless the details of the competent child care are picked out. In other words, we must now answer the question, "Why are the infants off to a good start? What is so good about our child care that you are justified in making that conclusion?"

In the following paragraphs I think enought evidence will be given to show that the claim made in Conclusion (1) is no idle boast but is based on solid empirical evidence.

Note: The evidence for the conclusions listed below has already been discussed in various chapters of the book and will not be repeated here. Instead, the relevant chapters will be cited and the reader is asked to look back (or recall from memory, if you are Einstein) to see what was said.

CONCLUSION (2): The babies in our sample received adequate personal attention.

The importance of this factor in child development was noted in several chapters of the book, most fully in Chapter 5. We also noticed in the above example of **Thabo** that he was almost never left alone. This is very important in the development of a feeling of security and trust. It is also important in intellectual development when adults create a stimulating environment for the baby, giving him things, interacting with gestures, facial expressions and, above all, with language.

But before we become too complacent, let us look ahead and remember that, if things go according to custom in Lesotho, these infants will **not** continue to receive this amount of stimulation and adult attention. When the next child arrives or when the child grows up into his third or fourth year, the amount of adult interaction decreases dramatically. This may be a pity as it is, if anything, more important at the later stages, to the child's growing intellectual or mental life, that he continues to receive attention; that his questions are answered; that he is **listened to seriously** and that his progress is rewarded. But much more will be said about this later age group (the 3 - 5 year olds) in **Phase 2** of the longitudinal study.

CONCLUSION (3): Carrying practices and early walking may aid mental development.

This topic was discussed in Chapters 3 and 5. The important conclusion we could legitimately draw from our research results is that, if these two factors in "exploration of the environment" were exploited to the full, we could find - as studies in other parts of Africa have found - that there is an accelerated psycho-motor (or mental plus physical) development in Basotho children. If this happens (and there is no reason why it should not) some rethinking would eventually be necessary concerning syllabi at the pre-school (nursery) and primary school levels. Once again, Phase 2 will delve deeper into this "conclusion" but even now, it is possible to say that these youngsters are off to such a good start that it seems a pity, when they reach primary school age, that their "good start" is forgotten and they are **pushed back** to follow a system imported, mainly for historical reason, from Britain, which does not take their accelerated abilities into account.

What is needed perhaps, is an indigenous system which recognises the advantages of the early infancy years in Lesotho and develops syllabi and methodologies **in advance** of what is offered at the present time. It may be objected that this suggestion is leaping ahead a little and going beyond the evidence of the present research, and this is true, but the seeds are already being planted of good, healthy growth. What a pity if this growth should be stifled by later educational approaches which are **too low!** Let the children reach

up to higher things. The evidence from the first year study is that they will be able to do it, if the good start is maintained.

CONCLUSION (4): The one year olds in the sample received adequate nutrition.

Readers are referred to Chapter 4 for the evidence backing up this conclusion. As we saw in that chapter, most one year olds in the sample of 400 were receiving, by the end of their first year, no less than three types of food - breast milk; extra milk and solids. Once again - off to a good start.

CONCLUSION (5): Many traditional practices are being kept.

Readers are referred to the previous chapter (chapter 7) for a discussion of tradition and change. If you look at the details of that chapter, you will notice that most of the traditional practices mentioned are still being practised by more than 50% of the sample.

Why is this important? One reason is that a common trend in many developing countries is towards the abandonment of traditional practices. In many countries, there is a noticeable move towards "western" practices, with the consequent belittling and neglect of time-honoured customs. Sociologists in these countries, and even the leaders and rulers of these peoples, express worry and apprehension at this headlong stampede to imitate the western world and most of us have noticed a determined effort in such countries to arrest this development. We see strong moves towards the reinstatement of national dress, dances, crafts, drama and music. While this is commendable, such moves may not go deep enough. After all, returning to traditional clothing, songs, etc. is only scraping the surface of the larger problem, which could be expressed as, "How do we preserve what is best in our culture but, at the same time, move forward into the 21st Century?"

The evidence from this section of **our** study seems to show that a **good balance** has been achieved, at least in this area of child rearing, between the old and the new. We see modern baby food and baby clothing being used, but at the same time the old ceremonies

which brighten the event of the birth of a baby and help to preserve national identity, are being jealously guarded. We might say that a baby who has had the advantages of modern baby foods and clothing but who has **also** been put through Basotho child rearing customs, can hold his head up high and proudly say, (if he could but talk!), "Yes, I may have had Nestum Number 1 and I wore nappies, but I also fulfilled our traditional customs so **I am truly Mosotho**".

CONCLUSION (6): A problem: Father Absence

Did we find any **disadvantages** in our study of child rearing practices in Lesotho? Of course we did. No society is perfect! One of the biggest problems is so well known that it needs little mention here. I refer to "Father Absence", a problem already discussed in Chapter 6. We all know about it but, in the economic situation prevailing at the present time, it is hard to see what can be done. It seems to be a "necessary evil".

Comfort can be taken, however, from much recent research which seems to suggest that the dire effects of father absence predicted in the 1950's and 60's have simply not come to pass. These predictions were based on the assumption that an integral family unit of father and mother plus children was essential to a child's proper growth and development. What modern studies have shown is that, although the "normal" parental dyad of father plus mother is preferable, it is by no means the only successful combination to produce healthy children. Much depends on the competence and skill of the mother in replacing or substituting for, the father. Also, we should note that, in the extended family system most common in Lesotho, the absence of the father is not so crucial as, say, in European cultures which operate the nuclear family system.

But overall, we can definitely say and repeat, the outstanding impression backed by most of our findings is, **OFF TO A GOOD START.**

SUGGESTIONS FOR FURTHER RESEARCH

In several places throughout this book the remark has been made, "this topic would reward further research." Here is a **short** list

of the seven most important areas **related to one year olds** which require further study. (I say **related to one year olds** because there are, of course, many hundreds of topics for other age groups - preschool, primary age, adolescents etc., which could be pursued, but the present research was limited to the first year of life, so our choice of further research topics is similarly limited.)

Further Research Topic (1): A detailed investigation of the psycho-motor development of Basotho neonates.

This topic would be complementary to the research project described in this book and would provide much needed data on an important area related to the link between physical and mental development.

It is suggested that Scales such as the Bailey; the Cattell or the Gezell, could be **adapted** for use in Lesotho, but great care would be needed in the adaptation. Better still if new indigenous scales could be developed.

Further Research Topic (2): Piaget's "Sensori Motor Stage" and Basotho One Year Olds.

This topic is related to the first but is more specifically focussed on cognitive development. As we are only dealing here with one year olds, only the first two or three of Piaget's six sensori motor stages should be looked at although, of course, if the sample could be followed into the second year so much the better.

There seems to be a great need for data in this area for, although many Piagetian studies have now been carried out in developing countries (including in Lesotho: (see Bam, E.E. 1982), very few have dealt with the sensori motor stage.

The ordinal scales adapted by Dunstd from Piaget's work could easily be adapted for Lesotho.

Further Research Topic (3): The effects of Father Absence on Infants.

Problems of methodology may arise from the fact that fathers return home after various lengths of time, i.e. some return every month, others every 3 months and so on. The backgrounds of each family, including economic status etc., would also need to be

considered but in general, this should prove a rewarding, much needed and fairly straightforward piece of research. (Chapter 6 refers to this topic.)

Further Research Topic (4): Early Nutrition.

This topic has been well studied in Lesotho at later ages (e.g. the pre-school level; school feeding programmes etc.) but not enough has yet been done on the very earliest weeks and months. Here, again, variables such as geographic location, economic status and the elusive "modernism" should be taken into account.

Further Research Topic (5): Household density and composition and its effects on the one year old.

As mentioned in Chapter 2, much research has been done on this topic in various parts of the world but not, to my knowledge, in Lesotho. The pattern of density/composition is changing and the drift to urban areas is modifying traditional family life. Undoubtedly these factors effect the infant but exactly how and why we just don't know.

Research Topic (6): Mother substitutes.

By this I mean an investigation of the role of various mother substitutes such as grandmothers, siblings, maids, nurse girls etc. Topics to look at might include the reasons for needing mother substitutes; their exact function; selection and, above all, the effect of substitution on the infant.

Needless to say, two groups of **matched** infants would be best here, one group will be those who have substitute mothers, the other would be the control group who did not have mother substitutes.

Research Topic (7): Mother-Child Interaction.

This is a vitally important topic which, unfortunately, the present study had to leave out because it requires frequent visits to mothers (and we only interviewed once).

The researcher would have to stay for long hours with a variety of families - rich and poor; rural and urban; observing infant-mother interactions. The effects of these interactions on the object permanence, language development and acceptance or rejection could be some of the aims.

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